

SmartLam GL17C

(Pre-cambered)

Design Guide



Table of contents

| | |
|--|-------|
| Introduction | 1 |
| GLTAA deflection limits | 1 |
| Ordering SmartLam GL 17C | 2 |
| Installation | |
| - Preparatory work | 2 |
| - Deflection | 2 |
| - Verticality | 2 |
| - Notches | 2 |
| - Holes for services | 2 |
| - Birdsmouthing | 3 |
| - Eaves overhang | 3 |
| - Multiple SmartLam GL 17C section beams | |
| - Top loaded beams | 3 |
| - Side loaded beams | 3 |
| - Steel and timber post fixing | 4 |
| Storage and handling | 4 |
| SmartLam GL 17C design/effective span | 5 |
| Durability and weather exposed application | 5 |
| Protection systems | |
| - During construction | 6 |
| - Exterior applications | 6 |
| - Painted SmartLam GL 17C | 6 |
| - Design and construction detailing tips | 7 |
| Fire rating (resistance) | 7 |
| Checking of SmartLam GL 17C | 8 |
| Designing with SmartLam GL 17C | |
| - Product specification | 9 |
| - Limit state design characteristic | 9 |
| - Strength reduction factors | 9 |
| - Duration of load | 9 |
| - Partial seasoning factor | 9 |
| - Length and position of bearing | 9 |
| - Load sharing | 9 |
| - Stability | 9 |
| - Temperature | 9 |
| - Beam section properties | 10 |
| Span tables | 11-19 |

SmartFrame Product Warranty*

Tilling Timber warrants that its SmartFrame Engineered Wood products will be free from manufacturing defects in workmanship and material.

In addition, provided the product is correctly installed and used, Tilling Timber warrants the adequacy of its design for the normal and expected life of the structure.

This warranty is backed by the full resources of Tilling Timber and by underwritten product liability insurance.

Tilling Timber Pty Ltd
31-45 Orchard Street
Kilsyth Vic 3137
Ph: +61 (0)3 9725 0222 Fax: +61 (0)3 9725 6569
Email: techsupport@tilling.com.au

Scope of this publication

This Design Guide and Load Tables assist in the selection of SmartLam GL 17C for some of the common structural arrangements met in domestic construction.

Methods of developing lateral restraint and providing adequate support, adequate anchorage against wind uplift, and overall structural stability are outside the scope of this publication.

Information on the above matters can be obtained from AS 1684 Residential timber-framed construction or from a structural engineer experienced in timber construction.

Tilling Timber Pty Ltd have structural engineers within the SmartFrame Design Centre who can be contacted for advice on matters concerning the use of its SmartFrame engineered timber products in timber construction via the technical support Helpline on 1300 668 690 or e-mail at techsupport@tilling.com

Substitution of other products

All load tables in this document are designed using the characteristic properties of GL 17C defined in table 7.1 of AS 1720.1, manufactured to AS/NZS 1328 by quality producers and distributed by Tilling Timber Pty Ltd.

Copyright

Copyright of this publication remains the property of Tilling Timber Pty Ltd, and reproduction of the whole or part of this publication without written permission from Tilling Timber Pty Ltd is prohibited.

Certification

As a professional engineer, qualified and experienced in timber engineering, I certify that the use of the SmartLam GL 17C members as shown in these tables, and installed in accordance with the provisions of this Design Guide, complies to the Building Code of Australia. These Span Tables have been prepared in accordance with standard engineering principles, the relevant test reports and Australian standards, ie:

- AS 1720.3 Residential timber-framed construction
- AS 1720.1 Timber structures - design methods
- AS 4055 wind loads for houses
- AS/NZS 4063 Characterisation of structural timber
- AS/NZS 1328 Glue laminated structural timber - performance requirements and minimum production requirements.
- GLTAA Unified design criteria

Craig Kay

CRAIG KAY RPEng, RPEQ-5100, EC-1961, PB0730, CC56335 C NER
National Product Engineer



The information contained in this product brochure is current as at March 2019 and is based on data available to Tilling Timber Pty Ltd at the time of going to print. Tilling Timber Pty Ltd has used its reasonable endeavours to ensure the accuracy and reliability of the information contained in this document and, to the extent permitted by law, will not be liable for any inaccuracies, omissions or errors in this information nor for any actions taken in reliance on this information. Tilling Timber Pty Ltd reserves the right to change the information contained in this document without prior notice. It is important that you call the technical support customer Helpline on 1300 668 690 to confirm that you have the most up to date information available.

SmartLam® GL 17C

Introduction

SmartLam GL 17C beams are manufactured for Tilling Timber by 3rd party audited quality glulam manufacturers to AS/NZS 1328. SmartLam GL 17C Glulam beams are engineered timber products with high strength, dimensional stability, great load carrying capacity and superior fire resistance.

All timber used for laminating is carefully selected from production and graded according to specification. After trimming to the desired size, all stock is kiln dried to 12% average moisture content, to ensure efficient bonding in the gluing operations. The laminations are finger jointed by machine, with glue being cured by cold press system and controlled temperature.

Benefits of SmartLam GL 17C®

Cost Effectiveness - SmartLam GL 17C beams high strength to weight ratio allows you to design for maximum loads over large spans with the smallest possible end sections.

Product Quality - All SmartLam GL 17C beams are manufactured in accordance with AS/NZS 1328 Glue Laminated Structural Timber and the Glued Laminated Timber Association (GLTAA) Industry standard GLTAA-4-91.

Fire safety - Extensive fire test data shows that large end section timber performs well in fire situations due to the formation of a protective layer of char which usually occurs at a temperature around 250° C. This charred area inhibits the effects of the fire on

the inner portion of the timber component, hence it maintains structural load support for measurable periods of time as the fire progresses.

Conversely, steel loses its strength rapidly as the temperature is raised. At about 550°C, it has lost about 50% of its original bending strength, and by 750°C it has lost 90%. Timber does not lose strength in the same way, with the loss of section size through charring the major reason for any strength reduction.

Fast easy erection - Timber is a user friendly building material, requiring no special tools other than those a normal builder would use, and with SmartLam GL 17C beams, installation is fast, easy and efficient.

Environmental responsibility - SmartLam GL 17C beams are made from timber from sustainable managed forests, a natural resource that is friendly to the environment.

Low maintenance - In most applications, SmartLam GL 17C beams will require little or no maintenance other than that which you would ordinarily carry out to any structural material.

Natural beauty - The natural beauty of timber is desired and highly appropriate in many architectural applications. Appearance Grade B SmartLam GL 17C beams allow you to build timber's natural warmth and beauty into your designs.

Serviceability Criteria

The deflection limits (serviceability) applied in these tables and reproduced in Table 1 below, are in accordance the Glued

Laminated Timber Association of Australia (GLTAA) Unified Design Criteria and in some circumstances, differ for those listed in AS 1720.3-2016.

Table 1: GLTAA Serviceability Criteria

| Member type | Long term | | Short term | |
|--|-----------------|-----------------------------------|----------------|-------------------|
| | $j_2 \times DL$ | $j_2 \times (DL+0.5 \text{ kPa})$ | LL | Serviceability WL |
| Bearers (floor loads only) | | L/300 or 12 mm | L/360 or 18 mm | |
| Bearers (with roof loads) | | L/300 or 12 mm | L/360 or 18 mm | L/150 |
| Joists | | L/300 or 15 mm | L/360 or 9 mm | |
| Lintels (with roof loads only) | L/300 or 9 mm | | L/250 or 9 mm | L/150 |
| Lintels (with roof and floor) | | L/300 or 9 mm | L/360 or 9 mm | L/200 |
| Strutting, hanging, and counter beams | L/300 or 15 mm | | L/270 or 15 mm | L/150 |
| Hanging/Strutting, Counter/Strutting beams | L/300 or 12 mm | | L/300 or 12 mm | L/150 |
| Roof beams, rafters, hips | L/300 or 20 mm | | L/250 | L/150 |
| Patio or verandah beams | L/400 or 10 mm | | L/250 or 12 mm | L/200 |

Where:

- DL = Dead load, LL = Live load, WL = Wind load,
- j_2 = Creep modification factor Clause 2.4.1.2 AS 1720.1

Ordering SmartLam GL 17C

SmartLam GL 17C glulam can be purchased with or without camber and in different appearance grades.

AS/NZS 1328.2 defines 3 appearance grades:

- Appearance Grade A - Sanded with any voids filled - intended for applications where appearance is important and clear or painted finishes are used
- Appearance Grade B - intended for applications where appearance is important but where a planed finish is acceptable
- Appearance Grade C - intended for applications where appearance is unimportant

SmartLam GL 17C B grade

"C" indicates pre-camber
"S" indicates no-pre-camber (straight)

Appearance grade

Stock SmartLam GL 17C will be supplied pre-cambered in B grade finish unless otherwise specifically requested.

Protection and handling

Care should be taken during delivery to avoid marking and to avoid damage. Unloading of trucks should be done by hand or with a crane, do not drop or dump members. During unloading with lifting equipment, use fabric or plastic belts or other slings which will not mark the wood. If chains or cables are used, provide protective blocking or padding. Guard against soiling, dirt, footprints, abrasions, or injury to sharp edges or corners.

Installation

Preparatory work

Carefully unload and handle the laminated members at job site to prevent surface marking and damage. If laminated timber is to be stored before erection, place it on blocks well off the ground with individual members separated by strips so that air may circulate around all four sides. The top and the sides of storage pile shall be covered with moisture resistant covering. Wrapping shall be left intact, but individual wrappings shall be slit or punctured on the lower side to permit the drainage of water that may have accumulated. Before erection, the assembly should be checked for any damage from water or handling, prescribed camber, and accuracy of anchorage connections.

Laminated beams can be nailed into place in the same way as solid timber beams. Alternatively, a range of plates are available for end fixing. For larger beams, special purpose, engineer designed end fixing should be used.

Deflection

All structural members deflect downwards when dead loads are applied, and therefore it is important to allow for this deflection structurally and/or aesthetically in the selection of the beam sizes.

The "Deflection Limits" table on page 1 details deflection limits for various applications.

Verticality

SmartLam GL 17C members must not be installed out of plumb more than height/500.

Notches

Large notches and holes in Glulam beams should normally be avoided as they cause abrupt changes in cross section and disrupt the stress flow in the structure. This gives rise to tension perpendicular to the grain and shear stresses around the holes and notches. For this reason, notches seriously reduce the strength of a beam, particularly if located in the tension zone of a beam. Unless specific allowance has been made in the design, no notches shall be made without first obtaining the advice of an engineer. Design rules are set out in AS 1720.1 Timber Engineering Code and should be followed closely when considering notching anywhere in a Glulam beam.

Holes for services

Horizontal Holes - Like notches, holes in a Glulam beam remove wood fibre, reduce the net area of the beam at the hole location, and introduce stress concentrations. For this reason, horizontal holes in Glulam beams are limited in size and location to maintain the structural integrity of the beam. Figure 2 below shows the zones of a uniformly loaded, simply supported beam where field drilling of holes may be considered.

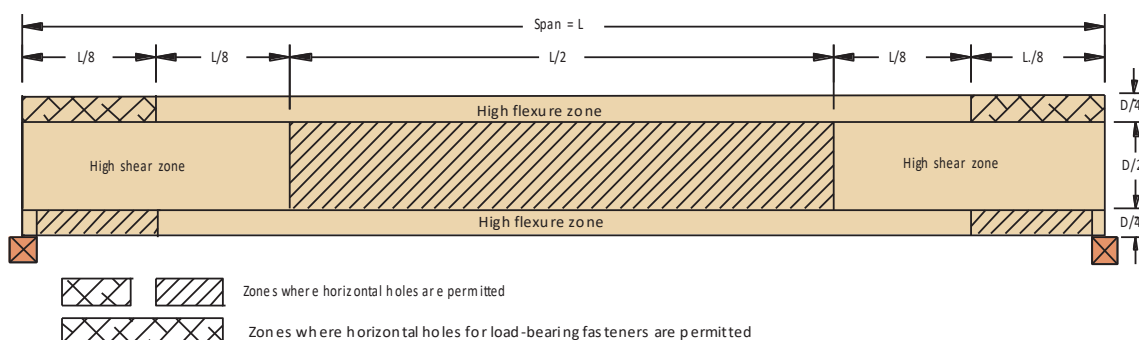
Field drilled horizontal holes should be for access only and should not be used as attachment points for brackets or other load bearing hardware unless specifically designed as such by the Engineer/Designer.

Regardless of the hole location, the net section of the beam remaining should be checked for flexure and horizontal shear.

Vertical holes - As a rule of thumb, vertical holes drilled through the depth of a Glulam beam cause a reduction in capacity at that location directly proportional to the ratio of 1½ times the diameter of the hole. For example, a 25 mm hole drilled in a 150 mm wide beam would reduce the capacity of the beam at that section by ¼. For this reason, where it is necessary to drill vertical holes through a Glulam member, the holes should be positioned in areas of the member that are stressed to less than 50% of the design in bending.

Holes for support of heavy equipment - Heavy equipment or piping suspended from Glulam should be attached so that the load is applied to the top of the member to avoid tension perpendicular to the grain stresses. Any horizontal holes required for support of significant weight, such as suspended heating and cooling units or main water lines, must be located above the neutral axis of the member and in a zone stressed to less than 50% of the design flexural stresses.

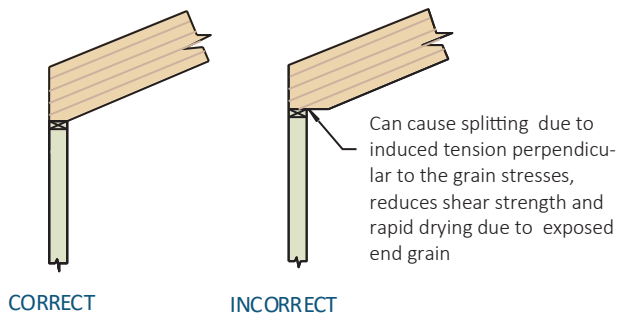
Figure 2 - Zones where horizontal holes are permitted in a uniformly loaded simply supported beam



Installation

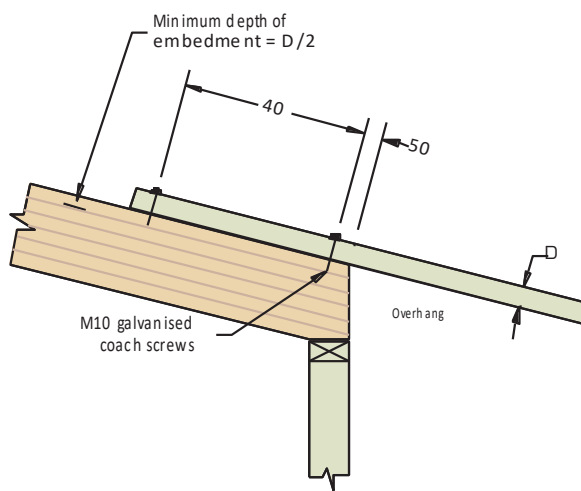
Birdsmouthing

Figure 3 - Birds mouting details for SmartLam GL 17C



Eaves overhang

Figure 4 - Eaves overhang details for SmartLam GL 17C



Note: Refer to AS 1684 Residential timber-framed construction code for overhang member size.

Allowable Eaves overhangs

1. Non Cyclonic Areas

- a. Beams for flat or similar roofs - Not Birds mouthed: Eaves overhang shall not exceed 40% of the actual beam span.
- b. Beams with conventional pitched roofs - Birds mouthed to one third their depth:
 - i. Sheet roof - 20% of actual beam span
 - ii. Tiled roof - 30% of actual beam span

2. Cyclonic Areas

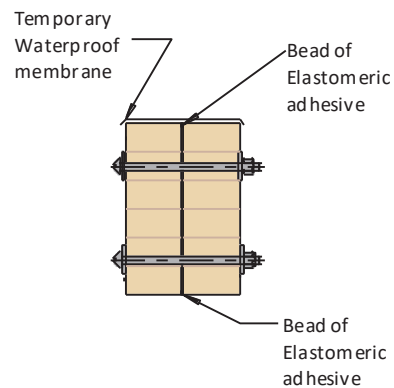
Recommendations as per above, but reduced as follows:

- i. Non Birds mouthed - 25% of actual beam span
- ii. Birds mouthed-
 - iii. Sheet roof - 10% of actual beam span
 - iv. Tiled roof - 20% of actual beam span

Multiple SmartLam GL 17C section beams

Vertical laminations may be achieved by adopting the principle described in clause 2.3 of AS 1684, however, due to the thickness of SmartLam GL 17C, nails are NOT suitable for combining SmartLam GL 17C beams.

Experience with Glulam beams indicates that multiple member laminations individual components may cup as a result of the ingress of moisture between laminates during construction. The suggested method of vertical lamination shown below provides a greater level of fixity between individual components, and combined with the use of a temporary waterproof membrane and an elastomeric adhesive prevents moisture penetration between the laminates.

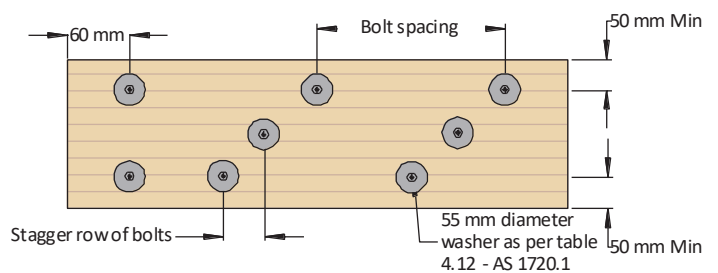


Recommended "during construction" protection from weather for multiple SmartLams.

Combination 1
2 pieces of
65 or 85 mm



Combination 2
3 pieces of
65 or 85 mm



Top loaded beams (Symmetrical loading)

The edges of the individual sections must be carefully aligned to each other so that the composite beam is flat, allowing the applied loads to be equally shared. It is recommended that there be 2 rows of galvanised M12 bolts at 600 mm centres.

Side loaded beams (Non – symmetrical loading)

When a load is applied to one side of a built-up SmartLam GL 17C or an unbalanced load is applied to both sides, the elements of the built up beam shall be attached such that the applied load is distributed equally to all elements. Like the minimum connection

Installation (cont'd)

shown above, the connection is made with bolts, with the allowable floor load width supported by either outside member shown in the table below.

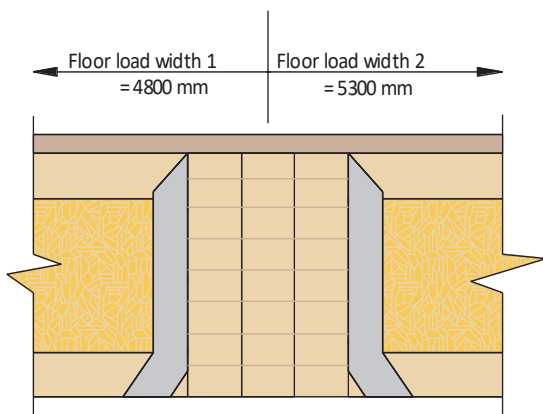
Maximum floor load width supported by either outside member (mm)

| Combination (see details below) | 12 mm Φ bolts | |
|------------------------------------|--------------------|--------------------|
| | 2 rows at 600 ctrs | 2 rows at 300 ctrs |
| Combination 1 | 7500 | 15000 |
| Combination 2 | 5600 | 11000 |

Notes:

1. Table values are for 40 kg/m² floors.
2. Bolts are to be grade 4.6 commercial bolts conforming to AS 1111. Bolt holes are to be a maximum of 13 mm diameter and are to be located NOT less than 50 mm from either edge.
3. All bolts shall be fitted with a washer at each end, of a size NOT less than that given in AS 1720.1 table 4.12.

How to use the maximum uniform side load table



Example:

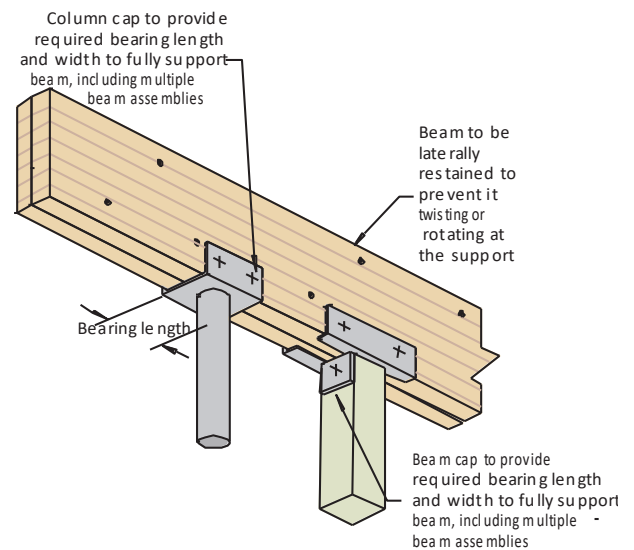
Beam of 2 SmartLam GL 17C's loaded on both side (Combination 1)

FLW 1 = 4800 mm, FLW 2 = 5300 mm

Total FLW = 4800 + 5300 = 10100 mm.

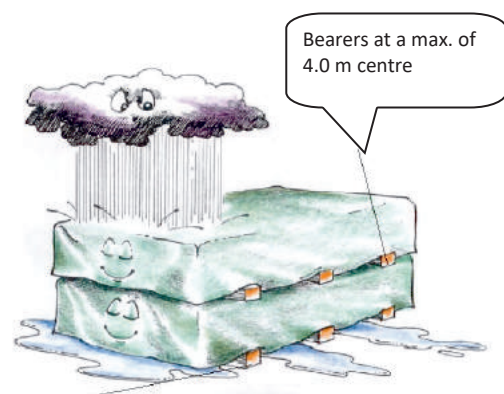
1. Use SmartFrame software or these SmartLam GL 17C safe load tables to size the two member section to support the FLW of 5100 mm.
2. Choose the larger of the side FLW's carried by the beam, in this case 5300 mm.
3. Enter the table at the "Combination 1" row and scan across to a table value greater than 5300 mm. The first value in the row at 10200 mm is greater than the 5300 mm required.
4. Thus adopt 2 rows of 12 mm Φ x bolts at 600 mm centres

Steel and Timber fixing to SmartLam GL 17C



Storage and handling of SmartLam GL 17s

1. Store SmartLam GL 17C's flat on a hard, dry surface
2. If surface isn't paved, the ground should be covered with a polythene film
3. Keep covered with waterproof material that allows bundles to "breathe"
4. Use bearers (bolsters) between the ground and the first bundle (4 metre max spacing)
5. Use 100 x 50 timber flat between bundles at same spacing as bolsters
6. Take great care to rewrap remaining material after opening bundles
7. Timber "grows" in thickness and depth when allowed to get wet....KEEP DRY!
8. Timber products with high MC has short term reduction in Characteristic Strengths KEEP DRY!
9. Under NO circumstances is stored SmartLam GL 17C to be in contact with the ground.



Use bearers to keep stacked material away from damp surfaces. Align bearer vertically

SmartLam GL 17C Design / Effective span

Normal structural analysis uses the centreline representation of the member. The term “span” can be defined in a number of ways and these are defined as follows:

Clear span. This is the distance between the faces of any support. It is generally the one easiest to measure and read from the drawings

Nominal span/centre-line span. This is the distance between the centre of the supports. This span is used to determine bending moments and deflections for continuous spanning members

Diagram (a) shows beam where bearings have been designed appropriately. The effective span is taken as the distance between the centre of each bearing area

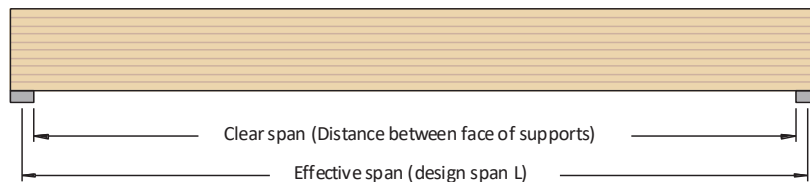
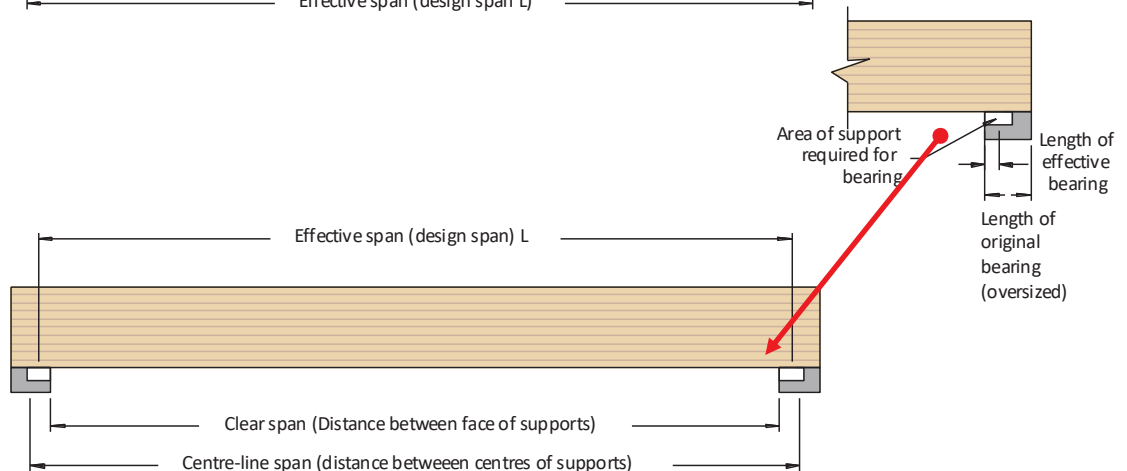


Diagram (b) shows beam where bearings at each end have been oversized. (This is frequently the case for beams that bear onto brickwork or concrete walls where the thickness of the wall is in excess of the area required to give the beam bearing capacity). To find the correct effective span:

1. Calculate the minimum bearing required to carry the loads satisfactorily
2. Add minimum bearing length to “clear span” distance

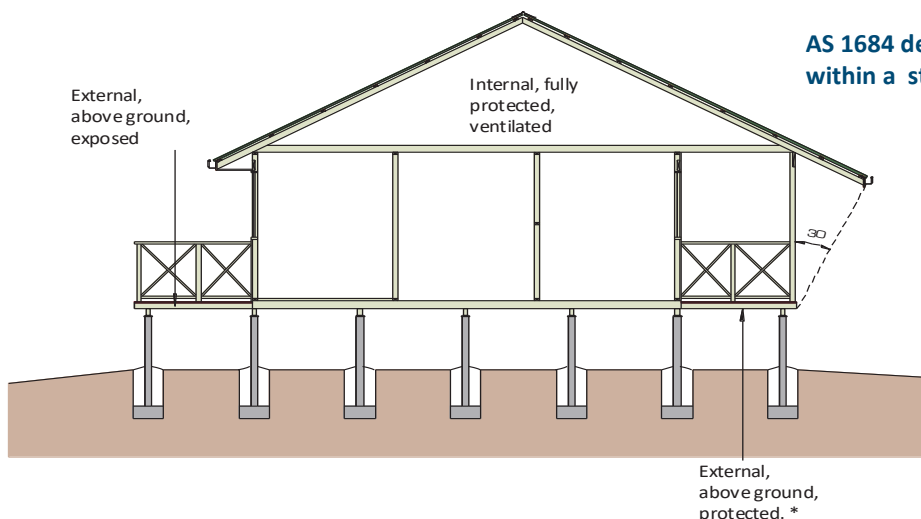


| span difference | effective span | resultant span description |
|----------------------|-----------------|----------------------------|
| 10% Max | main span | continuous |
| 10 – 30% | 1.1 x main span | continuous |
| Above 30% difference | main span | single |

$$\text{span difference} = \frac{(\text{major span} - \text{minor span})}{(\text{major span} + \text{minor span})} \times 100$$

The span to use in the case of unequal continuous spans is the "resultant span description" as shown in the table above. (Note: It is recommended for the most accurate designs, that the SmartFrame software be used.)

SmartLam durability and weather exposure



AS 1684 definitions of exposure zones within a structure

* External timbers are regarded as protected in AS 1684 if they are covered by a roof projection (or similar) at 30° to the vertical and they are well detailed and maintained (painted and kept well ventilated).

SmartLam durability and weather exposure

SmartLam GL 17s are manufactured from kiln dried timber (MC less than 15%), and therefore need to be protected from moisture cycling that can occur from:

- Exposure to direct sun and rain (including during construction)
- Contact or close exposure with moisture laden porous material (e.g. Concrete blocks)
- Exposure to extreme environments such as dry heating systems (e.g. slow combustion wood heaters), air conditioning, large north or west facing windows or moisture laden environments such as pool enclosures.

SmartLam GL 17C protection methods

1. During Construction (pre-water proof roof)

SmartLam GL 17C's are supplied WITHOUT any short term construction sealer. However if SmartLam GL 17C is expected to be exposed for an extended period or become wet, it is recommended that the beam be sealed with a construction sealer that is compatible with the final paint or varnish finish, or wrapped in plastic to provide protection (plastic must allow for drainage and air circulation to breath).

Examples:

- If the SmartLam GL 17C is installed inside a building without direct exposure to air-conditioning such as in wall cavity, NO protection to the beam is required.
- If the SmartLam GL 17C is installed inside a building with direct exposure to air conditioning or dry heat then a sealer is required.
- If the SmartLam GL 17C is under the eaves and protected from direct rain and sun, it is recommended that the construction sealer be lightly sanded and a finish coat of compatible premium quality paint be applied. (In accordance with paint manufacturer's specifications).
- If the SmartLam GL 17C is exposed to the sun or weather refer to "Exterior Applications" below.

Treatment options

SmartLam GL 17C may be ordered with preservative treatment to the H2 and H3 hazard class for protection against insect attack and biological decay respectively.

Treatment for a service at a higher hazard class satisfies all requirements for service at a lower hazard class. Products treated to H3 therefore meet or exceed the requirements for H1 and H2 applications.

Table 1 of Appendix A in AS/NZS 1604.5 is a guide to hazard classifications for various end-use applications. This table is for guidance only, and only lists limited application.

Example applications

1. Covered alfresco beams

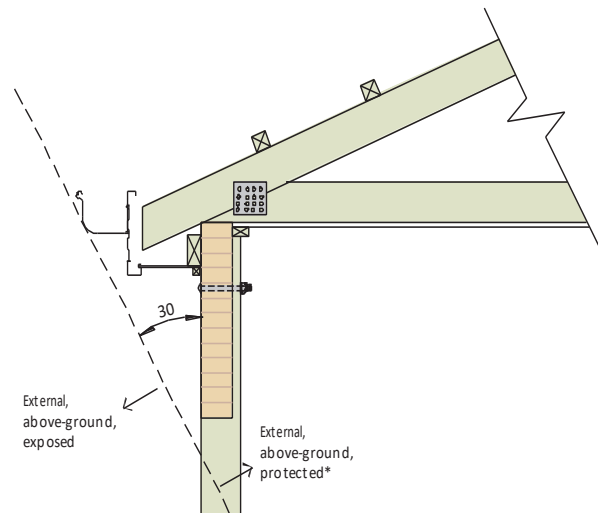
Alfresco beams constructed to comply with the diagram adjacent are technically classified in AS 1684 as **External, above-ground, protected** and can be an untreated Class 4 durability timber.

Notwithstanding this, SmartLam GL 17C H3 beams are ideal for

alfresco beam applications above for the following reason:

1. H3 treatments provide significantly more resistance to biological attack the untreated wood
2. H3 provides protection against termite attack

A SmartLam H3 in this application must be correctly painted with a premium quality protective finish See **3. Painting treated SmartLam GL 17C** below.



2. External, above ground, exposed

Untreated SmartLam GL 17C beams must NOT be used in **external, above ground, exposed applications** without the following:

- H3 treated to AS/NZS 1604.5
- Correctly detailed (e.g. End caps, good drainage and ventilation). See "Design & Construction detailing tips" below
- Correctly painted as per covered alfresco beam example above

It is important that an inspection and maintenance programme, based on exposure level and the paint manufacturer's recommendations be prepared.

3. Painting treated SmartLam GL 17C

(a) General

To provide the longest service life of the SmartLam GL 17C, it is recommended the SmartLam GL 17s are painted with an exterior paint with a Light Reflectance Value (LRV) greater than 30%. Heat reduction exterior paints should be used where the desired colour is dark or has a LRV of less than 30%. The heat reflective paints colours should be limited to a Total Solar Reflectance (TSR) value greater than 29%.

Any paint or stain must be recommended by the manufacturer as being suitable for the proposed application and must be applied in a manner in strict compliance to the manufacturer's recommendations

1. The wood must be dry and clean prior to applying any finish coating. If initial cleaning of the treated wood is needed,

Durability and weather exposure (Cont'd)

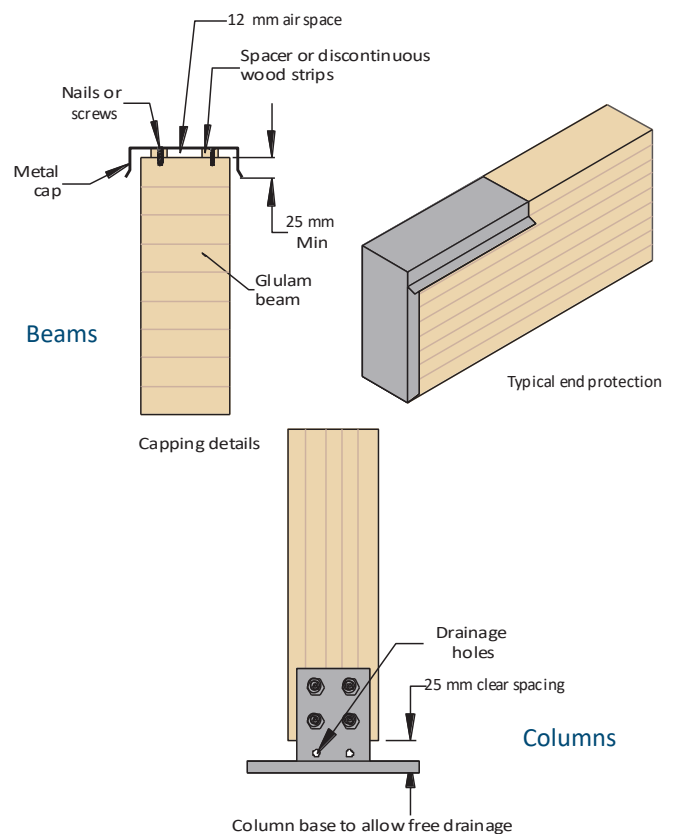
it is recommended that the project be cleaned with a deck cleaning product and allow to fully dry

2. At this time, a clear water repellent can be added to the project. If applied, allow 8 weeks prior to the application of a semi-transparent stain or paint
3. If no water repellent is added, an oil based stain can be applied to the clean, dry wood in 30-60 days from treatment date.
4. A water based stain can be applied to the clean, dry wood in 45-70 days from treatment date.
5. Depending on the treatment method used, if the wood is left uncoated and without UV protection:
6.
 - i. The typical brown colour of the Copper Quat treated wood will naturally weather to a grey colour over long-term exposure to the sun
 - ii. The Azole treated wood has no colouration so it will naturally weather to a grey colour over long-term exposure to the sun

Users must always conduct their own tests on coatings in inconspicuous areas of the project to determine acceptability of colour, adhesion and appearance.

3. Design & Construction detailing tips

- i. The use of building overhangs and other structures which protect the beams from excessive moisture movement and sun exposure.
- ii. Shielding of the beam from free moisture or direct sun. The use of metal, fibro or plastic shields on the exposed faces or ends of beams is highly recommended to help maintain the beam in an unstressed dry condition.
- iii. All beams should be provided with adequate ventilation so that moisture content within beams will not exceed 15% and moisture gradients across the beam will not occur.
- iv. The use of arrised or round edges on beams to reduce the likelihood of coating failures on sharp edges.
- v. The use of drip edges or other devices which provide a path for free moisture flow away from the timber beam. Refer to detail below opposite.
- vi. Joint detailing should, wherever possible, comply with the following:
 - Keep horizontal contact areas to a minimum, in favour of self draining vertical surfaces.
 - Ventilate joint surfaces by using spacers, wherever possible.
 - Always use compatible fasteners which have adequate corrosion protection and do not cause splitting during installation e.g. Hot dipped galvanic coatings or stainless steel.
 - Ensure any moisture entering a joint is not trapped but can adequately drain away from the joint.
- vii. Allow for thermal expansion/contraction in the joint design.



Fire ratings (resistance)

The Fire Resistance Level (FRL) of an object is expressed as the number of minutes for which the specimen fulfils the requirements of each of the three criteria, being:

- i. Structural adequacy
- ii. Integrity; and
- iii. Insulation, and expressed in that order under test conditions.

In a fire, SmartLam GL 17C beams have an inherent fire rating. As timber burns, a layer of charcoal forms enclosing a core of timber which is yet unaffected by the fire. This timber core maintains its structural capacity. Hence, dependant upon the loss of material to the charcoal layer, the SmartLam GL 17C beam can carry the dead load of the structure for a period of time.

The Structural Adequacy Resistance to fire can be established by reference to AS 1720.4.

$$\text{Notional charring rate } c = 0.4 + \left(\frac{280}{\delta} \right)^2$$

Where d = timber density at a moisture content of 12%, in kg/m^3 . For SmartLam GL 17s, this equates to a char rate of 0.54 mm per minute.

The Structural Adequacy Fire resistance period can be determined by performing a series of successive iterations of time. The calculated value is reached when the effective residual section is no longer capable of resisting the design loads.

NOTE: this calculation is for the structural adequacy component of the FRL ONLY. More information on the determination of the FRL go to www.woodsolutions.com.au.

Checking in SmartLam GL 17C

One of the advantages of glued laminated timber construction is that while seasoning checks may occur for the same reasons that they do in sawn members, checking in glued laminated timber will generally occur to a much lesser degree because of careful control of the moisture content of timber used for laminating. Checks in wood are separations along the fibres normally occurring across the rings of annual growth resulting from stresses developed during changes in moisture content. Checks in glued laminate timber may appear as openings parallel to the grain on the sides of members.

As wood loses moisture to the surrounding atmosphere, the outer fibres of the member lose moisture at a more rapid rate than do the inner fibres. As outer fibres try to shrink, they are restrained by the inner portion of the member that has higher moisture content. The more rapid the rate of drying, the greater will be the differential in shrinkage between the outer and inner fibres resulting in higher shrinkage stresses.

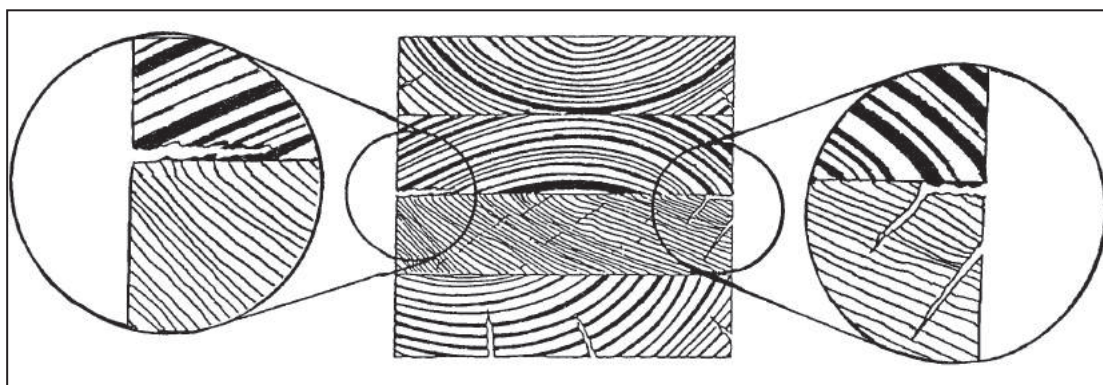
These resultant stresses perpendicular to the grain of the wood can cause characteristic wood seasoning checks. The influence of checks on the structural performance of glued laminated timber members is generally minor. Checking can be minimized by careful installation practices that avoid prolonged exposure of the members during construction.

Identification of checking

Checks occur as transverse separations or openings that are nearly parallel to the grain direction in glued laminated timber and generally follow the grain direction around knots and along sloping grain. Differences in the shrinkage rate of individual laminations used in glued laminated timber tend to concentrate shrinkage stresses at or near glue lines, resulting in checks.

Checks are often confused with delamination that occurs when the glue bond is not adequate. The presence of wood fibre separation in these openings is the key distinguishing characteristic of seasoning checks. Openings due to inadequate adhesive bonding may appear as smooth wood surface separations, possibly darkened by the adhesive film, or as glossy surface areas of adhesive with an absence of torn wood fibres.

Checking often occurs along the first glue line adjacent to the outer lamination that may dry more rapidly because a larger surface area of that lamination is exposed to the air. This condition is sometimes aggravated when the outer lamination tends to cup, creating tension perpendicular to grain stresses along or near the first glue line.



Significance of checking

In general, checks have little effect on the strength of glued laminated members. Glued laminated members are made from laminations that are thin enough to season readily in kiln drying schedules without developing checks. Checks usually appear on the wide faces of the timber and do not materially affect the shear strength of the laminations. In cases where members are designed for loading parallel to the wide face of the laminations, checks may affect the shear strength of the beam their effect may be evaluated in the same manner as for sawn timber. Seasoning checks in bending members affect only the horizontal shear capacity.

In establishing allowable horizontal shear values, normal checking due to seasoning has been considered.

Checks are usually not of structural importance unless they are significant in depth, occur in the mid-height of the member near the supports, and the design of the member is governed by shear. If these conditions exist, the reduction in shear strength is directly proportional to the ratio of the depth of checks to the width of the bending member. Checks in columns are not of structural importance unless the check develops into a split, thereby increasing the l/d ratio of the column.

Additional information

While checking is not considered to be of structural significance, the reason for the checking and the means by which further checking may be minimized should be determined.

If there is concern regarding structural adequacy, advice can be obtained from engineers from the SmartFrame Design Centre or a structural engineer experienced and qualified in glued laminated timber technology should evaluate the significance of the checking.

The SmartFrame **Technical Note - "Evaluation of Checking in Glued Laminated Timber (Glulam)"** gives detailed analysis of the modification to structural capacity as a result of severe checking.

Designing with SmartLam GL 17C

The design information contained within this Design Guide is for the properties of SmartLam GL 17C only. Other manufacturers' LVL may have different properties and therefore cannot be designed using this information.

1. Product Specification

| | | |
|--------------------------------|--|--|
| Lamella: | Thickness: | 30-45 mm |
| | Species: | Various softwood and some hardwood species |
| | Strength Group | SD4 |
| | Joints: | Finger joint |
| Dimensional tolerances: | Length: | ± 10 mm |
| | Depth: | ≤ 100 mm ± 1 mm |
| | | ≥ 100 ≤ 302 mm ± 3 mm |
| ≥ 301 ≤ 600 mm ± 4 mm | | |
| Thickness: | - 0, +4 mm at 12% moisture content | |
| Adhesive: | Complies with AS/NZS 4364:2010 | |
| Treatment options: | Untreated, H2, and H3 treatment to AS 1604.5 | |

2. Limit State Design Characteristic Properties

(1) Dry conditions

| Timber Strength Properties ⁽¹⁾ | | |
|---|-----------|-----------------------|
| Bending | f'_b | 40 MPa |
| Tension Parallel to grain | f'_t | 20 MPa |
| Tension Perpendicular to grain | f'_{tp} | 0.5 MPa |
| Compression Parallel to grain | f'_c | 33 MPa |
| Compression Perpendicular to grain - Edge | f'_p | 13 MPa |
| Shear | f'_s | 4.2 MPa |
| Average Elastic Modulus | E | 16,700 MPa |
| Average Modulus of Rigidity | G | 1110 MPa |
| Average Density | | 650 kg/m ³ |
| Moisture Content | | 12-15% |

3. Strength reduction factor

The strength reduction factor for calculating the design capacities of structural members shall be taken from the table below, referenced from AS 1720.1 –2010

| Application of SmartLam GL 17C as a structural member | | |
|---|---|--|
| Category 1 | Category 2 | Category 3 |
| Structural members for houses for which failure would be unlikely to affect an area greater than 25 m ² ; OR secondary members in structures other than houses | Primary structural members in structures other than houses; OR elements in houses for which failure would be likely to affect an area* greater than 25 m ² | Primary structural members in structures intended to fulfil essential services or post disaster function |
| Strength reduction factor ϕ * | | |
| 0.95 | 0.85 | 0.75 |

* AS 1720.1:2010 Table 2.1

4. Duration of load

The duration of load factor k_1 for strength is defined within clause 2.4 of AS 1720.1.

| Duration | Service class / exposure classification | | |
|-----------------------|---|-----|-----------------|
| | 1, 2 | 3 | Severe/ Adverse |
| Short term ≤ 1 Day | 1.0 | 1.0 | 1.0 |
| Long term > 12 months | 1.5 | 2.0 | 3.0* |

Notes:

- * Any beams to be used in service class 3 are outside the scope of these span tables, therefore specialist design advice should be sought from an engineer.
- In general, the size of this beam can conservatively be obtained by the following method:
 - Obtain the beam size for service class 1 & 2
 - Obtain the EI_{xx} from the "Section Properties" table for this beam
 - Obtain from the "Section Properties" table a beam size with an $EI_{xx} \Rightarrow 2/1.5 \times EI_{xx}$ of the original beam
 - Follow the recommendations of the GLTAA Technical Data Sheet No 2: "Glulam in weather exposed applications"
- Service Classes 1,2 & 3 are defined in AS 1328

5. Partial seasoning factor

SmartLam GL 17C is a seasoned timber product, generally k_4 equals 1. Where the glulam is subjected to conditions in which the average moisture content for a 12 month period is expected to exceed 15%, the characteristic capacity shall be decreased. The value of k_4 shall be the greater of:

- $k_4 = 1 - 0.3 \frac{EMC - 15}{10}$;
- $k_4 = 0.7$

Where EMC is the highest value of the annual moisture content (percent) that the timber will attain in service.

6. Length and position of bearing

The k_7 bearing factor is defined in clause 2.4.4 of AS 1720.1

7. Load sharing

Because of the reduced variability of strength values of glulam compared to solid timber, the load sharing factor $k_9 = 1.0$ as defined in clause 7.4.3 of AS 1720.1

8. Stability

The stability factor k_{12} is defined within section 7 of AS 1720.1 beams. The methods for calculating k_{12} for solid wood in section 3 of AS 1720.1 shall generally apply except that the material constant (ρ_b or ρ_c) for beams and column shall be as given in Tables 7.2(A) and 7.2(B)

9. Temperature

For covered timber structures under ambient conditions, no modification for strength need be made for the effect of temperature (i.e., k_6 equals 1.0) except that where seasoned timber is used in structures erected in coastal regions of Queensland north of latitude 25°S, and all other regions of Australia north of latitude 16°S, the strength shall be modified by a factor k_6 of 0.9.

SmartLam GL 17C section properties

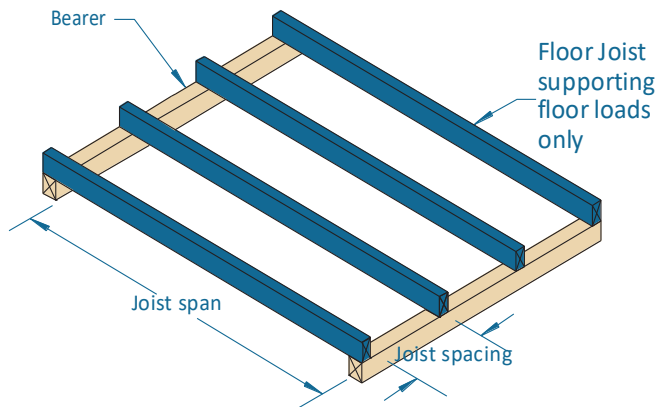
| Nominal Size DxB mm | Beam mass kg/m | Nominal section area 10 ³ mm ² | Major axis | | | Minor Axis | |
|------------------------|-------------------|--|--|--|--|--|--|
| | | | Zxx 10 ³ mm ² | Ixx 10 ⁶ mm ⁴ | EIxx 10 ⁹ Nmm ² | Zyy 10 ³ mm ² | Iyy 10 ⁶ mm ⁴ |
| 130 x 65 | 4.6 | 8.5 | 183 | 12 | 199 | 91.5 | 3.0 |
| 165 x 65 | 5.9 | 10.7 | 295 | 24 | 406 | 116.2 | 3.8 |
| 195 x 65 | 7.0 | 12.7 | 412 | 40 | 671 | 137.3 | 4.5 |
| 230 x 65 | 8.2 | 15.0 | 573 | 66 | 1101 | 162.0 | 5.3 |
| 260 x 65 | 9.3 | 16.9 | 732 | 95 | 1590 | 183.1 | 6.0 |
| 295 x 65 | 10.5 | 19.2 | 943 | 139 | 2322 | 207.7 | 6.8 |
| 300 x 65 | 10.7 | 19.5 | 975 | 146 | 2442 | 211.3 | 6.9 |
| 330 x 65 | 11.8 | 21.5 | 1180 | 195 | 3251 | 232.4 | 7.6 |
| 360 x 65 | 12.9 | 23.4 | 1404 | 253 | 4220 | 253.5 | 8.2 |
| 395 x 65 | 14.1 | 25.7 | 1690 | 334 | 5575 | 278.1 | 9.0 |
| 425 x 65 | 15.2 | 27.6 | 1957 | 416 | 6944 | 299.3 | 9.7 |

| | | | | | | | |
|----------|------|------|------|------|-------|-------|------|
| 130 x 85 | 6.1 | 11.1 | 239 | 16 | 260 | 156.5 | 6.7 |
| 165 x 85 | 7.7 | 14.0 | 386 | 32 | 531 | 198.7 | 8.4 |
| 195 x 85 | 9.1 | 16.6 | 539 | 53 | 877 | 234.8 | 10.0 |
| 230 x 85 | 10.8 | 19.6 | 749 | 86 | 1439 | 277.0 | 11.8 |
| 295 x 85 | 13.8 | 25.1 | 1233 | 182 | 3037 | 355.2 | 15.1 |
| 330 x 85 | 15.4 | 28.1 | 1543 | 255 | 4251 | 397.4 | 16.9 |
| 360 x 85 | 16.8 | 30.6 | 1836 | 330 | 5519 | 433.5 | 18.4 |
| 395 x 85 | 18.5 | 33.6 | 2210 | 437 | 7290 | 475.6 | 20.2 |
| 425 x 85 | 19.9 | 36.1 | 2559 | 544 | 9081 | 511.8 | 21.8 |
| 460 x 85 | 21.5 | 39.1 | 2998 | 689 | 11514 | 553.9 | 23.5 |
| 495 x 85 | 23.1 | 42.1 | 3471 | 859 | 14347 | 596.1 | 25.3 |
| 525 x 85 | 24.5 | 44.6 | 3905 | 1025 | 17117 | 632.2 | 26.9 |
| 560 x 85 | 26.2 | 47.6 | 4443 | 1244 | 20774 | 674.3 | 28.7 |
| 590 x 85 | 27.6 | 50.2 | 4931 | 1455 | 24295 | 710.5 | 30.2 |

| | | | | | | | |
|-----------|------|------|------|------|-------|--------|-------|
| 295 x 115 | 18.7 | 33.9 | 1668 | 246 | 4109 | 650.2 | 37.4 |
| 330 x 115 | 20.9 | 38.0 | 2087 | 344 | 5751 | 727.4 | 41.8 |
| 360 x 115 | 22.8 | 41.4 | 2484 | 447 | 7467 | 793.5 | 45.6 |
| 395 x 115 | 25.0 | 45.4 | 2990 | 591 | 9863 | 870.6 | 50.1 |
| 425 x 115 | 26.9 | 48.9 | 3462 | 736 | 12286 | 936.8 | 53.9 |
| 460 x 115 | 29.1 | 52.9 | 4056 | 933 | 15578 | 1013.9 | 58.3 |
| 495 x 115 | 31.3 | 56.9 | 4696 | 1162 | 19411 | 1091.1 | 62.7 |
| 525 x 115 | 33.2 | 60.4 | 5283 | 1387 | 23159 | 1157.2 | 66.5 |
| 560 x 115 | 35.4 | 64.4 | 6011 | 1683 | 28106 | 1234.3 | 71.0 |
| 590 x 115 | 37.3 | 67.9 | 6672 | 1968 | 32869 | 1300.5 | 74.8 |
| 295 x 135 | 21.9 | 39.8 | 1958 | 289 | 4823 | 896.1 | 60.5 |
| 330 x 135 | 24.5 | 44.6 | 2450 | 404 | 6752 | 1002.4 | 67.7 |
| 360 x 135 | 26.7 | 48.6 | 2916 | 525 | 8765 | 1093.5 | 73.8 |
| 395 x 135 | 29.3 | 53.3 | 3511 | 693 | 11579 | 1199.8 | 81.0 |
| 425 x 135 | 31.6 | 57.4 | 4064 | 864 | 14422 | 1290.9 | 87.1 |
| 460 x 135 | 34.2 | 62.1 | 4761 | 1095 | 18287 | 1397.3 | 94.3 |
| 495 x 135 | 36.8 | 66.8 | 5513 | 1364 | 22787 | 1503.6 | 101.5 |
| 525 x 135 | 39.0 | 70.9 | 6202 | 1628 | 27186 | 1594.7 | 107.6 |
| 560 x 135 | 41.6 | 75.6 | 7056 | 1976 | 32994 | 1701.0 | 114.8 |
| 590 x 135 | 43.8 | 79.7 | 7832 | 2311 | 38586 | 1792.1 | 121.0 |

Floor joists supporting floor loads only

Floor mass - 40 kg/m²



EXAMPLE:

domestic floor loads
single span
joist spacing = 450 mm
joist span = 6000 mm

Enter single span table at 450 mm in joist spacing column, read down to a span equal to or greater than 6000 mm

ADOPT:

SmartLam GL 17C - 260 x 65

Loadings: Permanent - Self weight + 40 kg/m² + 0.5 kPa of the live load, live load - 1.5 kPa or floor point load of 1.8 kN

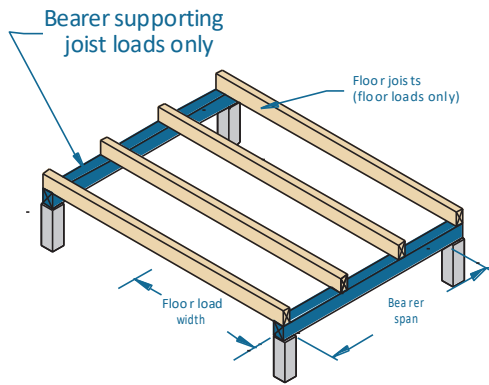
| Joist spacing (mm) | 300 | 450 | 600 | 300 | 450 | 600 |
|---------------------------------|-------------------------------------|-------|------|-----------------|-------|-------|
| Member size (GL17C) DxB (mm) | Maximum recommended joist span (mm) | | | | | |
| | Single span | | | Continuous span | | |
| 130x65 | 4200 | 3350 | 3050 | 4850 | 4050 | 3550 |
| 165x65 | 5000 | 4400 | 3950 | 5800 | 5250 | 4600 |
| 195x65 | 5650 | 5100 | 4700 | 6600 | 5950 | 5550 |
| 230x65 | 6400 | 5800 | 5400 | 7450 | 6750 | 6250 |
| 260x65 | 7050 | 6350 | 5900 | 8150 | 7400 | 6850 |
| 295x65 | 7750 | 7000 | 6500 | 8950 | 8100 | 7550 |
| 330x65 | 8400 | 7600 | 7050 | 9750 | 8800 | 8200 |
| 360x65 | 8950 | 8100 | 7550 | 9950 | 9400 | 8750 |
| 395x65 | 9600 | 8700 | 8100 | 10000 | 9950 | 9400 |
| 425x65 | 9950 | 9200 | 8550 | 10500 | 9950 | 9900 |
| 460x65 | 9950 | 9750 | 9050 | 11100 | 9950 | 9950 |
| 495x65 | 10000 | 9950 | 9600 | 11750 | 9950 | 9950 |
| 525x65 | 10350 | 9950 | 9950 | 12000 | 9950 | 9950 |
| 560x65 | 10800 | 9950 | 9950 | 12000 | 10300 | 9950 |
| 590x65 | 10750 | 9950 | 9950 | 12000 | 10700 | 10000 |
| 130x85 | 4450 | 3700 | 3350 | 5200 | 4500 | 3900 |
| 165x85 | 5350 | 4850 | 4350 | 6200 | 5600 | 5100 |
| 195x85 | 6050 | 5500 | 5100 | 7050 | 6350 | 5900 |
| 230x85 | 6850 | 6200 | 5750 | 7950 | 7200 | 6700 |
| 260x85 | 7500 | 6800 | 6300 | 8750 | 7900 | 7350 |
| 295x85 | 8250 | 7450 | 6950 | 9600 | 8650 | 8050 |
| 330x85 | 9000 | 8100 | 7550 | 9950 | 9450 | 8800 |
| 360x85 | 9600 | 8650 | 8050 | 9950 | 9950 | 9350 |
| 395x85 | 9950 | 9300 | 8650 | 10600 | 9950 | 9950 |
| 425x85 | 9950 | 9800 | 9150 | 11200 | 9950 | 9950 |
| 460x85 | 10000 | 9950 | 9700 | 11850 | 9950 | 9950 |
| 495x85 | 10550 | 9950 | 9950 | 12000 | 10050 | 9950 |
| 525x85 | 11000 | 9950 | 9950 | 12000 | 10500 | 9950 |
| 560x85 | 10700 | 9950 | 9950 | 12000 | 11000 | 10250 |
| 590x85 | 10050 | 10200 | 9950 | 12000 | 11400 | 10650 |

NOTES:

- Spans are suitable for solid timber, particle board and ply flooring. floor sheeting glued and nailed to joists will improve floor rigidity. Where heavy overlay material is to be applied, such as a mortar bed tiled or slate floor, the permanent load allowance should be increased to 1.2 kPa. A reduction of joist spacing may be used to accommodate this extra permanent load. A satisfactory result can be achieved by adopting the maximum spans for 600 mm and 450 mm spacing but installing the joists at 450 and 300 mm spacing respectively.
- For beams which are continuous over two unequal spans, the design span and the 'resultant span description' depend upon the percentage span differences between the two spans as shown on page 7
- D = member depth, B = member breadth, NS = not suitable.
- The above table was based on a maximum DL of 40 (kg/m²), floor live load of 1.5 (kPa), floor point load of 1.8 (kN).
- End bearing lengths = 42 mm at end supports and 58 mm at internal supports for continuous members.
- Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering

Single span floor bearers supporting floor loads only - Single span

Floor mass - 40 kg/m²



EXAMPLE:

single span bearer = 4000 mm
floor load width = 5800 mm

Enter single span table at 6000 mm in floor load width column, read down to a span equal to or greater than 4000 mm

ADOPT:

SmartLam GL 17C - 360 x 65
(With additional bearing length of 10 mm)

Loadings: permanent - self weight + 40 kg/m²+0.5 kPa of the live load, live load - 1.5 kPa or floor point load of 1.8 kN

| Floor load width (mm) | 1200 | 1800 | 2400 | 3000 | 3600 | 4200 | 4800 | 5400 | 6000 | 6600 |
|---------------------------------|--|-------|-------|-------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Member size (GL17C) DxB (mm) | Maximum recommended Single span bearer span (mm) | | | | | | | | | |
| 130x65 | 2850 | 2500 | 2250 | 2100 | 2000 | 1850 | 1800 | 1700 | 1600 | 1500 |
| 165x65 | 3650 | 3200 | 2900 | 2700 | 2500 | 2400 | 2250 | 2150 | 2000 | 1900 |
| 195x65 | 4300 | 3750 | 3400 | 3150 | 3000 | 2850 | 2700 | 2550 | 2400 | 2250 |
| 230x65 | 4950 | 4400 | 4050 | 3750 | 3500 | 3350 | 3150 | 3000 | 2800 | 2700 |
| 260x65 | 5500 | 4900 | 4500 | 4200 | 4000 | 3800 | 3600 | 3350 | 3200 | 3050 |
| 295x65 | 6150 | 5500 | 5050 | 4700 | 4450 | 4250 | 4050 | 3800 | 3600 ₅ | 3450 ₅ |
| 330x65 | 6850 | 6050 | 5550 | 5200 | 4900 | 4650 | 4500 ₅ | 4250 ₅ | 4050 ₁₀ | 3850 ₁₀ |
| 360x65 | 7450 | 6550 | 6000 | 5600 | 5300 | 5050 | 4850 ₅ | 4650 ₁₀ | 4400 ₁₅ | 4200 ₁₅ |
| 395x65 | 8100 | 7150 | 6550 | 6100 | 5750 | 5450 ₅ | 5250 ₁₀ | 5050 ₁₅ | 4850 ₂₀ | 4600 ₂₀ |
| 425x65 | 8550 | 7700 | 7000 | 6500 | 6150 ₅ | 5850 ₁₀ | 5600 ₁₅ | 5400 ₂₀ | 5200 ₂₀ | 4950 ₂₅ |
| 460x65 | 9050 | 8200 | 7550 | 7000 | 6600 ₅ | 6300 ₁₀ | 6000 ₁₅ | 5800 ₂₀ | 5600 ₂₅ | 5350 ₃₀ |
| 165x85 | 4000 | 3500 | 3150 | 2950 | 2750 | 2600 | 2500 | 2400 | 2300 | 2200 |
| 195x85 | 4650 | 4100 | 3750 | 3450 | 3250 | 3100 | 2950 | 2850 | 2750 | 2600 |
| 230x85 | 5350 | 4750 | 4350 | 4100 | 3850 | 3650 | 3500 | 3350 | 3200 | 3050 |
| 260x85 | 5950 | 5300 | 4850 | 4550 | 4300 | 4100 | 3950 | 3800 | 3650 | 3450 |
| 295x85 | 6650 | 5900 | 5400 | 5050 | 4800 | 4550 | 4400 | 4250 | 4100 | 3900 |
| 330x85 | 7400 | 6550 | 6000 | 5600 | 5300 | 5050 | 4850 | 4650 | 4500 | 4350 ₅ |
| 360x85 | 8050 | 7100 | 6500 | 6050 | 5700 | 5450 | 5200 | 5000 | 4850 ₅ | 4700 ₁₀ |
| 395x85 | 8650 | 7750 | 7100 | 6600 | 6200 | 5900 | 5650 | 5450 ₅ | 5250 ₁₀ | 5100 ₁₀ |
| 425x85 | 9150 | 8250 | 7600 | 7050 | 6650 | 6350 | 6050 ₅ | 5800 ₁₀ | 5600 ₁₀ | 5450 ₁₅ |
| 460x85 | 9700 | 8750 | 8150 | 7650 | 7200 | 6800 ₅ | 6500 ₁₀ | 6250 ₁₀ | 6050 ₁₅ | 5850 ₂₀ |
| 495x85 | 10250 | 9250 | 8600 | 8150 | 7700 | 7300 ₅ | 7000 ₁₀ | 6700 ₁₅ | 6450 ₂₀ | 6250 ₂₅ |
| 525x85 | 10700 | 9700 | 9000 | 8500 | 8150 ₅ | 7750 ₁₀ | 7400 ₁₅ | 7100 ₂₀ | 6850 ₂₅ | 6600 ₂₅ |
| 295x115 | 7250 | 6450 | 5900 | 5500 | 5200 | 5000 | 4750 | 4600 | 4450 | 4300 |
| 330x115 | 8100 | 7150 | 6550 | 6100 | 5750 | 5500 | 5250 | 5050 | 4900 | 4750 |
| 360x115 | 8700 | 7750 | 7100 | 6600 | 6250 | 5950 | 5700 | 5500 | 5300 | 5100 |
| 395x115 | 9350 | 8450 | 7750 | 7200 | 6800 | 6450 | 6200 | 5950 | 5750 | 5550 |
| 425x115 | 9850 | 8900 | 8300 | 7750 | 7300 | 6950 | 6650 | 6350 | 6150 | 5950 ₅ |
| 460x115 | 10450 | 9450 | 8800 | 8300 | 7900 | 7500 | 7150 | 6850 | 6600 ₅ | 6400 ₁₀ |
| 495x115 | 11050 | 10000 | 9300 | 8800 | 8400 | 8050 | 7650 | 7350 ₅ | 7100 ₁₀ | 6850 ₁₀ |
| 525x115 | 11550 | 10450 | 9700 | 9200 | 8800 | 8450 | 8150 ₅ | 7800 ₁₀ | 7500 ₁₀ | 7250 ₁₅ |
| 560x115 | 12000 | 10950 | 10200 | 9650 | 9200 | 8850 ₅ | 8550 ₅ | 8300 ₁₀ | 8000 ₁₅ | 7750 ₂₀ |
| 590x115 | 12000 | 11400 | 10600 | 10000 | 9600 | 9200 ₅ | 8900 ₁₀ | 8650 ₁₅ | 8450 ₂₀ | 8150 ₂₀ |
| 260x135 | 6750 | 6000 | 5500 | 5150 | 4900 | 4650 | 4500 | 4300 | 4200 | 4050 |
| 295x135 | 7600 | 6750 | 6200 | 5800 | 5450 | 5200 | 5000 | 4800 | 4650 | 4500 |
| 330x135 | 8450 | 7500 | 6850 | 6400 | 6050 | 5750 | 5500 | 5300 | 5150 | 4950 |
| 360x135 | 9050 | 8150 | 7450 | 6950 | 6550 | 6250 | 5950 | 5750 | 5550 | 5350 |
| 395x135 | 9700 | 8800 | 8150 | 7600 | 7150 | 6800 | 6500 | 6250 | 6000 | 5850 |
| 425x135 | 10250 | 9250 | 8650 | 8150 | 7650 | 7300 | 6950 | 6700 | 6450 | 6250 |
| 460x135 | 10900 | 9850 | 9150 | 8650 | 8250 | 7850 | 7500 | 7200 | 6950 | 6700 ₅ |
| 495x135 | 11500 | 10400 | 9650 | 9150 | 8750 | 8400 | 8050 | 7750 | 7450 ₅ | 7200 ₅ |
| 525x135 | 12000 | 10850 | 10100 | 9550 | 9150 | 8800 | 8500 | 8200 ₅ | 7900 ₅ | 7650 ₁₀ |
| 560x135 | 12000 | 11400 | 10600 | 10050 | 9600 | 9200 | 8900 | 8650 ₅ | 8450 ₁₀ | 8150 ₁₅ |
| 590x135 | 12000 | 11850 | 11050 | 10450 | 9950 | 9600 | 9300 ₅ | 9000 ₁₀ | 8750 ₁₀ | 8550 ₁₅ |

Continuous span floor bearers supporting floor loads only

Floor mass - 40 kg/m²

Loadings: permanent - self weight + 40 kg/m² +0.5 kPa of the live load, live load - 1.5 kPa or floor point load of 1.8 kN

| Floor load width (mm) | 1200 | 1800 | 2400 | 3000 | 3600 | 4200 | 4800 | 5400 | 6000 | 6600 |
|---------------------------------|--|--------------------|---------------------|---------------------|---------------------|--------------------|--------------------|---------------------|---------------------|---------------------|
| Member size (GL17C) DxB (mm) | Maximum recommended Continuous span bearer span (mm) | | | | | | | | | |
| 130x65 | 3500 | 2950 | 2550 | 2300 | 2100 | 1900 | 1800 | 1700 | 1600 | 1500 |
| 165x65 | 4450 | 3750 | 3250 | 2900 | 2650 | 2450 | 2250 | 2150 | 2000 | 1900 |
| 195x65 | 5050 | 4450 | 3850 | 3400 | 3100 | 2900 | 2700 | 2550 | 2400 ₅ | 2250 ₁₀ |
| 230x65 | 5700 | 5150 | 4500 | 4050 | 3700 | 3400 ₅ | 3150 ₁₀ | 3000 ₁₅ | 2800 ₁₅ | 2700 ₂₀ |
| 260x65 | 6250 | 5650 | 5100 | 4550 | 4150 ₅ | 3850 ₁₀ | 3600 ₂₀ | 3350 ₂₀ | 3200 ₃₀ | 3050 ₃₀ |
| 295x65 | 6850 | 6200 | 5750 | 5150 ₁₀ | 4700 ₁₅ | 4350 ₂₀ | 4050 ₃₀ | 3800 ₃₅ | 3600 ₄₀ | 3450 ₄₅ |
| 330x65 | 7400 | 6750 | 6250 ₅ | 5800 ₁₅ | 5250 ₂₅ | 4850 ₃₀ | 4550 ₄₀ | 4250 ₄₅ | 4050 ₅₀ | 3850 ₆₀ |
| 360x65 | 7900 | 7200 | 6700 ₁₀ | 6300 ₂₅ | 5750 ₃₅ | 5300 ₄₀ | 4950 ₅₀ | 4650 ₅₅ | 4400 ₆₅ | 4200 ₇₀ |
| 395x65 | 8450 | 7700 | 7150 ₁₅ | 6750 ₃₀ | 6300 ₄₀ | 5800 ₅₀ | 5400 ₆₀ | 5100 ₇₀ | 4850 ₈₀ | 4600 ₉₅ |
| 425x65 | 8900 | 8100 ₅ | 7550 ₂₀ | 7150 ₃₅ | 6750 ₅₀ | 6250 ₆₀ | 5850 ₇₀ | 5500 ₈₅ | 5200 ₁₀₀ | 4950 ₁₀₅ |
| 460x65 | 9450 | 8600 ₁₀ | 8000 ₂₅ | 7550 ₄₅ | 7200 ₆₀ | 6750 ₇₀ | 6300 ₉₀ | 5950 ₁₀₅ | 5600 ₁₁₀ | 5350 ₁₂₀ |
| 165x85 | 4750 | 4250 | 3700 | 3300 | 3000 | 2800 | 2600 | 2450 | 2300 | 2200 |
| 195x85 | 5400 | 4850 | 4400 | 3900 | 3550 | 3300 | 3050 | 2900 | 2750 | 2600 |
| 230x85 | 6050 | 5500 | 5100 | 4600 | 4200 | 3900 | 3600 | 3400 ₅ | 3200 ₅ | 3050 ₁₀ |
| 260x85 | 6650 | 6000 | 5600 | 5200 | 4750 | 4400 ₅ | 4100 ₅ | 3850 ₁₀ | 3650 ₁₅ | 3450 ₂₀ |
| 295x85 | 7250 | 6600 | 6150 | 5800 | 5350 ₅ | 4950 ₁₀ | 4650 ₁₅ | 4350 ₂₀ | 4100 ₂₅ | 3900 ₃₀ |
| 330x85 | 7900 | 7150 | 6700 | 6300 ₅ | 6000 ₁₅ | 5550 ₂₀ | 5200 ₂₅ | 4850 ₃₀ | 4600 ₃₅ | 4400 ₄₅ |
| 360x85 | 8400 | 7650 | 7100 | 6750 ₁₀ | 6400 ₂₀ | 6050 ₃₀ | 5650 ₃₅ | 5300 ₄₀ | 5050 ₄₅ | 4800 ₅₅ |
| 395x85 | 8950 | 8150 | 7600 | 7200 ₁₅ | 6900 ₂₅ | 6600 ₃₅ | 6200 ₄₅ | 5800 ₅₀ | 5500 ₆₀ | 5250 ₆₅ |
| 425x85 | 9450 | 8600 | 8050 ₅ | 7600 ₂₀ | 7250 ₃₀ | 6950 ₄₀ | 6650 ₅₀ | 6250 ₆₀ | 5950 ₇₀ | 5650 ₈₀ |
| 460x85 | 10000 | 9100 | 8500 ₁₀ | 8050 ₂₅ | 7700 ₃₅ | 7400 ₅₀ | 7150 ₆₀ | 6800 ₇₅ | 6400 ₈₅ | 6100 ₁₀₀ |
| 495x85 | 10500 | 9600 | 9000 ₁₅ | 8500 ₃₀ | 8100 ₄₀ | 7800 ₅₅ | 7550 ₇₀ | 7300 ₉₅ | 6900 ₁₀₀ | 6550 ₁₁₀ |
| 525x85 | 10950 | 10050 ₅ | 9350 ₂₀ | 8900 ₃₅ | 8500 ₄₅ | 8150 ₆₀ | 7850 ₈₀ | 7600 ₁₀₀ | 7300 ₁₁₀ | 6950 ₁₂₀ |
| 295x115 | 7750 | 7050 | 6600 | 6250 | 5950 | 5700 | 5400 ₅ | 5050 ₁₀ | 4800 ₁₅ | 4550 ₂₀ |
| 330x115 | 8400 | 7650 | 7150 | 6800 | 6450 | 6200 ₅ | 6000 ₁₅ | 5650 ₂₀ | 5350 ₂₅ | 5100 ₃₀ |
| 360x115 | 8950 | 8150 | 7650 | 7200 | 6900 ₅ | 6650 ₁₀ | 6400 ₂₀ | 6150 ₂₅ | 5850 ₃₀ | 5550 ₃₅ |
| 395x115 | 9550 | 8750 | 8150 | 7750 | 7400 ₁₀ | 7100 ₁₅ | 6850 ₂₅ | 6650 ₃₅ | 6400 ₄₀ | 6100 ₄₅ |
| 425x115 | 10050 | 9200 | 8600 | 8150 | 7800 ₁₀ | 7500 ₂₀ | 7250 ₃₀ | 7000 ₄₀ | 6800 ₄₅ | 6550 ₅₅ |
| 460x115 | 10600 | 9750 | 9100 | 8650 ₅ | 8250 ₁₅ | 7950 ₂₅ | 7650 ₃₅ | 7450 ₄₅ | 7200 ₅₅ | 7050 ₆₅ |
| 495x115 | 11150 | 10250 | 9600 | 9100 ₁₀ | 8700 ₂₀ | 8400 ₃₀ | 8100 ₄₀ | 7850 ₅₀ | 7600 ₆₀ | 7450 ₇₅ |
| 525x115 | 11650 | 10700 | 10000 | 9500 ₁₅ | 9100 ₂₅ | 8750 ₃₅ | 8450 ₄₅ | 8200 ₅₅ | 7950 ₇₀ | 7750 ₈₅ |
| 560x115 | 12000 | 11200 | 10500 ₅ | 9950 ₂₀ | 9550 ₃₀ | 9150 ₄₀ | 8850 ₅₀ | 8600 ₆₅ | 8350 ₈₀ | 8150 ₁₀₀ |
| 590x115 | 12000 | 11600 | 10900 ₁₀ | 10350 ₂₀ | 9900 ₃₅ | 9500 ₄₅ | 9200 ₅₅ | 8900 ₇₀ | 8700 ₉₀ | 8450 ₁₀₅ |
| 260x135 | 7350 | 6700 | 6250 | 5900 | 5650 | 5400 | 5150 | 4850 | 4550 | 4350 ₅ |
| 295x135 | 8000 | 7350 | 6850 | 6500 | 6200 | 5950 | 5750 | 5500 ₅ | 5200 ₁₀ | 4950 ₁₀ |
| 330x135 | 8700 | 7950 | 7450 | 7050 | 6700 | 6450 | 6250 ₅ | 6050 ₁₀ | 5800 ₁₅ | 5500 ₂₀ |
| 360x135 | 9250 | 8450 | 7900 | 7500 | 7150 | 6900 ₅ | 6650 ₁₀ | 6450 ₁₅ | 6250 ₂₅ | 6000 ₃₀ |
| 395x135 | 9850 | 9050 | 8450 | 8000 | 7650 | 7350 ₅ | 7100 ₁₅ | 6900 ₂₅ | 6700 ₃₀ | 6550 ₃₅ |
| 425x135 | 10350 | 9500 | 8900 | 8450 | 8100 ₅ | 7800 ₁₀ | 7500 ₂₀ | 7300 ₃₀ | 7100 ₃₅ | 6900 ₄₅ |
| 460x135 | 10950 | 10050 | 9450 | 8950 | 8550 ₁₀ | 8250 ₁₅ | 7950 ₂₅ | 7700 ₃₅ | 7500 ₄₀ | 7300 ₅₀ |
| 495x135 | 11500 | 10600 | 9950 | 9450 | 9050 ₁₀ | 8700 ₂₀ | 8400 ₃₀ | 8150 ₄₀ | 7900 ₄₅ | 7700 ₅₅ |
| 525x135 | 12000 | 11050 | 10400 | 9850 ₅ | 9450 ₁₅ | 9050 ₂₅ | 8750 ₃₅ | 8500 ₄₅ | 8250 ₅₀ | 8050 ₆₀ |
| 560x135 | 12000 | 11550 | 10850 | 10300 ₁₀ | 9900 ₂₀ | 9500 ₃₀ | 9200 ₄₀ | 8900 ₅₀ | 8650 ₆₀ | 8450 ₇₀ |
| 590x135 | 12000 | 12000 | 11250 | 10700 ₁₀ | 10250 ₂₅ | 9900 ₃₅ | 9550 ₄₅ | 9250 ₅₅ | 9000 ₆₅ | 8800 ₇₅ |

NOTES:

1. D = member depth, B = member breadth, NS = not suitable.
2. The above table was based on a maximum DL of 40 (kg/m²), floor live load of 1.5 (kPa), floor point load of 1.8 (kN).
3. End bearing lengths = 42 mm at end supports and 58 mm at internal supports for continuous members. Subscript values indicate the minimum additional bearing length where required to be greater than 42 mm at end supports and 58 mm at internal supports.
4. Restraint value for slenderness calculations is 600 mm. (floor joist centers at 600 mm max)
5. Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering

Floor bearers supporting single storey load bearing wall - sheet and tiled roof

Single span

Floor mass - 40 kg/m²

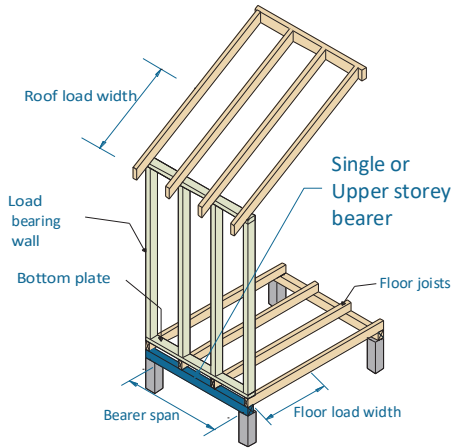
EXAMPLE:

sheet roof - 40 kg/m²
 floor load width = 3500 mm
 roof load width = 1950 mm
 bearer span = 3000 mm (single span)

Enter single span table at 4800 mm in floor load width column, 4500 roof load width column, read down to a span equal to or greater than 3000 mm in the 40 kg/m² row.

ADOPT:

SmartLam GL 17C — 260 x 65



| Floor load width (mm) | Roof mass (kg/m ²) | 1200 | | | 2400 | | | 4800 | | |
|------------------------------|--|------|------|-------------------|------|------|--------------------|--------------------|--------------------|--------------------|
| Roof load width (mm) | | 1500 | 4500 | 7500 | 1500 | 4500 | 7500 | 1500 | 4500 | 7500 |
| Member size (GL17C) DxB (mm) | Maximum recommended single span bearer span (mm) | | | | | | | | | |
| 130x65 | 40 | 2200 | 1900 | 1750 | 1950 | 1750 | 1650 | 1600 | 1500 | 1450 |
| | 75 | 2050 | 1700 | 1500 | 1850 | 1600 | 1450 | 1550 | 1450 | 1300 |
| 165x65 | 40 | 2800 | 2450 | 2250 | 2450 | 2250 | 2100 | 2050 | 1950 | 1850 |
| | 75 | 2650 | 2200 | 1950 | 2350 | 2050 | 1850 | 2000 | 1850 | 1700 |
| 195x65 | 40 | 3350 | 2950 | 2700 | 2950 | 2700 | 2500 | 2450 | 2350 | 2200 |
| | 75 | 3150 | 2600 | 2300 | 2800 | 2450 | 2200 | 2400 | 2200 | 2000 |
| 230x65 | 40 | 3900 | 3500 | 3200 | 3500 | 3200 | 2950 | 2950 | 2750 | 2650 |
| | 75 | 3700 | 3100 | 2750 | 3350 | 2900 | 2650 | 2850 | 2600 | 2400 |
| 260x65 | 40 | 4300 | 3900 | 3600 | 3900 | 3650 | 3400 | 3350 | 3150 | 3000 |
| | 75 | 4100 | 3550 | 3150 | 3750 | 3300 | 3000 | 3250 | 2950 | 2750 |
| 295x65 | 40 | 4800 | 4350 | 4000 | 4350 | 4050 | 3800 | 3750 | 3600 | 3400 ₅ |
| | 75 | 4550 | 3950 | 3600 | 4200 | 3750 | 3400 | 3700 | 3350 ₅ | 3150 ₅ |
| 330x65 | 40 | 5300 | 4750 | 4400 | 4800 | 4450 | 4200 | 4150 ₅ | 3950 ₅ | 3800 ₁₀ |
| | 75 | 5050 | 4350 | 3950 | 4600 | 4100 | 3800 | 4050 ₅ | 3750 ₁₀ | 3500 ₁₀ |
| 360x65 | 40 | 5700 | 5150 | 4750 | 5150 | 4750 | 4500 | 4450 ₁₀ | 4250 ₁₀ | 4100 ₁₀ |
| | 75 | 5450 | 4650 | 4250 | 4950 | 4400 | 4100 ₅ | 4350 ₁₀ | 4050 ₁₅ | 3800 ₁₅ |
| 395x65 | 40 | 6250 | 5600 | 5150 | 5600 | 5200 | 4850 | 4850 ₁₀ | 4600 ₁₅ | 4400 ₁₅ |
| | 75 | 5900 | 5050 | 4600 | 5400 | 4800 | 4400 ₅ | 4700 ₁₅ | 4350 ₁₅ | 4100 ₂₀ |
| 425x65 | 40 | 6650 | 5950 | 5500 | 6000 | 5500 | 5200 | 5150 ₁₅ | 4900 ₂₀ | 4700 ₂₀ |
| | 75 | 6300 | 5400 | 4900 ₅ | 5750 | 5100 | 4700 ₁₀ | 5050 ₁₅ | 4650 ₂₀ | 4350 ₂₅ |
| 165x85 | 40 | 3050 | 2700 | 2450 | 2700 | 2450 | 2300 | 2250 | 2150 | 2050 |
| | 75 | 2900 | 2400 | 2150 | 2600 | 2250 | 2050 | 2200 | 2000 | 1850 |
| 195x85 | 40 | 3650 | 3250 | 2950 | 3250 | 2950 | 2750 | 2700 | 2550 | 2450 |
| | 75 | 3450 | 2850 | 2550 | 3100 | 2700 | 2450 | 2650 | 2400 | 2200 |
| 230x85 | 40 | 4200 | 3800 | 3500 | 3800 | 3500 | 3250 | 3200 | 3050 | 2900 |
| | 75 | 4000 | 3400 | 3050 | 3650 | 3200 | 2900 | 3150 | 2850 | 2650 |
| 260x85 | 40 | 4650 | 4200 | 3900 | 4200 | 3900 | 3700 | 3650 | 3450 | 3300 |
| | 75 | 4400 | 3800 | 3450 | 4050 | 3650 | 3300 | 3550 | 3250 | 3000 |
| 295x85 | 40 | 5200 | 4650 | 4350 | 4650 | 4350 | 4100 | 4050 | 3850 | 3700 |
| | 75 | 4900 | 4250 | 3850 | 4500 | 4050 | 3700 | 3950 | 3700 | 3450 |
| 330x85 | 40 | 5700 | 5150 | 4750 | 5150 | 4800 | 4500 | 4450 | 4250 | 4100 |
| | 75 | 5450 | 4700 | 4250 | 4950 | 4450 | 4100 | 4350 | 4050 | 3800 ₅ |
| 360x85 | 40 | 6200 | 5550 | 5150 | 5550 | 5150 | 4850 | 4800 | 4600 | 4400 ₅ |
| | 75 | 5900 | 5050 | 4600 | 5350 | 4750 | 4400 | 4700 | 4350 ₅ | 4100 ₅ |
| 395x85 | 40 | 6750 | 6050 | 5600 | 6050 | 5600 | 5250 | 5200 ₅ | 4950 ₅ | 4750 ₅ |
| | 75 | 6400 | 5500 | 4950 | 5850 | 5150 | 4750 | 5100 ₅ | 4700 ₅ | 4450 ₁₀ |
| 425x85 | 40 | 7250 | 6450 | 6000 | 6500 | 6000 | 5600 | 5550 ₅ | 5300 ₁₀ | 5100 ₁₀ |
| | 75 | 6850 | 5850 | 5300 | 6250 | 5500 | 5100 | 5450 ₅ | 5000 ₁₀ | 4700 ₁₅ |
| 460x85 | 40 | 7800 | 7000 | 6450 | 7000 | 6450 | 6050 | 6000 ₁₀ | 5700 ₁₀ | 5450 ₁₅ |
| | 75 | 7400 | 6300 | 5700 | 6700 | 5950 | 5450 ₅ | 5850 ₁₀ | 5400 ₁₅ | 5050 ₂₀ |
| 495x85 | 40 | 8400 | 7500 | 6900 | 7500 | 6900 | 6450 | 6400 ₁₅ | 6100 ₁₅ | 5800 ₁₅ |
| | 75 | 7950 | 6750 | 6050 ₅ | 7200 | 6350 | 5800 ₁₀ | 6250 ₁₅ | 5750 ₂₀ | 5400 ₂₀ |

Floor bearers supporting single storey load bearing wall - sheet and tiled roof Single span (cont'd)

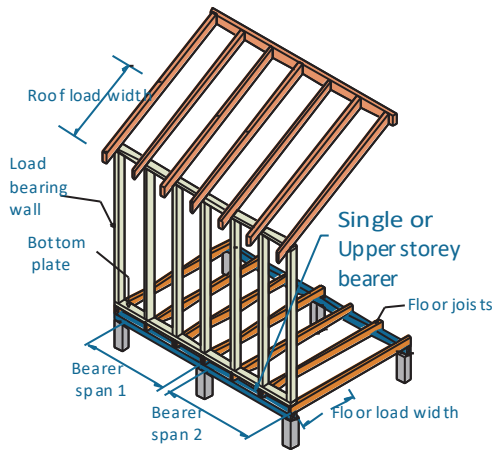
| Floor load width (mm) | Roof mass (kg/m ²) | 1200 | | | 2400 | | | 4800 | | |
|---------------------------------|-----------------------------------|--|-------|------|-------|------|-------------------|--------------------|--------------------|--------------------|
| Roof load width (mm) | | 1500 | 4500 | 7500 | 1500 | 4500 | 7500 | 1500 | 4500 | 7500 |
| Member size (GL17C) DxB (mm) | | Maximum recommended single span bearer span (mm) | | | | | | | | |
| 230x115 | 40 | 4550 | 4100 | 3800 | 4100 | 3850 | 3600 | 3600 | 3400 | 3200 |
| | 75 | 4350 | 3750 | 3350 | 4000 | 3550 | 3200 | 3500 | 3150 | 2950 |
| 260x115 | 40 | 5050 | 4550 | 4250 | 4550 | 4250 | 4000 | 3950 | 3800 | 3650 |
| | 75 | 4800 | 4150 | 3800 | 4400 | 3950 | 3650 | 3900 | 3600 | 3350 |
| 295x115 | 40 | 5650 | 5100 | 4700 | 5100 | 4700 | 4450 | 4400 | 4200 | 4050 |
| | 75 | 5350 | 4600 | 4200 | 4900 | 4400 | 4050 | 4300 | 4000 | 3750 |
| 330x115 | 40 | 6250 | 5600 | 5200 | 5600 | 5200 | 4900 | 4850 | 4650 | 4450 |
| | 75 | 5950 | 5100 | 4600 | 5400 | 4800 | 4450 | 4750 | 4400 | 4150 |
| 360x115 | 40 | 6750 | 6050 | 5600 | 6100 | 5600 | 5300 | 5250 | 5000 | 4800 |
| | 75 | 6400 | 5500 | 5000 | 5850 | 5200 | 4800 | 5150 | 4750 | 4450 |
| 395x115 | 40 | 7400 | 6600 | 6100 | 6600 | 6100 | 5750 | 5700 | 5400 | 5200 |
| | 75 | 7000 | 6000 | 5400 | 6400 | 5650 | 5200 | 5550 | 5150 | 4800 |
| 425x115 | 40 | 7950 | 7100 | 6550 | 7100 | 6550 | 6150 | 6100 | 5800 | 5550 |
| | 75 | 7500 | 6400 | 5800 | 6850 | 6050 | 5550 | 5950 | 5500 | 5150 ₅ |
| 460x115 | 40 | 8600 | 7650 | 7050 | 7650 | 7050 | 6600 | 6550 | 6250 | 5950 ₅ |
| | 75 | 8100 | 6900 | 6200 | 7350 | 6500 | 5950 | 6400 | 5900 ₅ | 5500 ₅ |
| 495x115 | 40 | 9250 | 8250 | 7550 | 8250 | 7600 | 7100 | 7050 ₅ | 6650 ₅ | 6400 ₅ |
| | 75 | 8750 | 7400 | 6650 | 7900 | 6950 | 6350 | 6850 ₅ | 6300 ₅ | 5900 ₁₀ |
| 525x115 | 40 | 9850 | 8750 | 8000 | 8750 | 8050 | 7500 | 7450 ₅ | 7050 ₁₀ | 6750 ₁₀ |
| | 75 | 9300 | 7850 | 7050 | 8400 | 7350 | 6750 | 7250 ₅ | 6650 ₁₀ | 6250 ₁₅ |
| 560x115 | 40 | 10550 | 9350 | 8550 | 9350 | 8550 | 8000 | 7950 ₁₀ | 7500 ₁₀ | 7200 ₁₅ |
| | 75 | 9950 | 8350 | 7500 | 8950 | 7850 | 7150 ₅ | 7750 ₁₀ | 7100 ₁₅ | 6600 ₁₅ |
| 230x135 | 40 | 4750 | 4300 | 4000 | 4300 | 4000 | 3750 | 3750 | 3550 | 3400 |
| | 75 | 4500 | 3900 | 3550 | 4150 | 3700 | 3400 | 3650 | 3350 | 3100 |
| 260x135 | 40 | 5300 | 4750 | 4450 | 4750 | 4450 | 4200 | 4150 | 3950 | 3800 |
| | 75 | 5000 | 4350 | 3950 | 4600 | 4100 | 3800 | 4050 | 3750 | 3550 |
| 295x135 | 40 | 5900 | 5300 | 4950 | 5300 | 4950 | 4650 | 4600 | 4400 | 4250 |
| | 75 | 5600 | 4850 | 4400 | 5150 | 4600 | 4200 | 4500 | 4200 | 3950 |
| 330x135 | 40 | 6550 | 5900 | 5450 | 5900 | 5450 | 5150 | 5100 | 4850 | 4650 |
| | 75 | 6200 | 5350 | 4850 | 5700 | 5050 | 4650 | 4950 | 4600 | 4350 |
| 360x135 | 40 | 7100 | 6350 | 5900 | 6350 | 5900 | 5550 | 5500 | 5250 | 5000 |
| | 75 | 6750 | 5750 | 5200 | 6150 | 5450 | 5000 | 5350 | 4950 | 4650 |
| 395x135 | 40 | 7750 | 6950 | 6400 | 6950 | 6400 | 6000 | 5950 | 5700 | 5450 |
| | 75 | 7350 | 6300 | 5650 | 6700 | 5900 | 5450 | 5850 | 5400 | 5050 |
| 425x135 | 40 | 8350 | 7450 | 6850 | 7450 | 6850 | 6450 | 6400 | 6050 | 5800 |
| | 75 | 7900 | 6700 | 6050 | 7150 | 6350 | 5800 | 6250 | 5750 | 5400 |
| 460x135 | 40 | 9050 | 8050 | 7400 | 8050 | 7400 | 6950 | 6900 | 6550 | 6250 |
| | 75 | 8550 | 7250 | 6500 | 7750 | 6800 | 6250 | 6700 | 6200 | 5800 |
| 495x135 | 40 | 9750 | 8650 | 7950 | 8650 | 7950 | 7450 | 7400 | 7000 | 6700 |
| | 75 | 9200 | 7800 | 7000 | 8350 | 7300 | 6700 | 7200 | 6600 | 6200 ₅ |
| 525x135 | 40 | 10350 | 9200 | 8450 | 9200 | 8450 | 7900 | 7800 | 7400 ₅ | 7100 ₅ |
| | 75 | 9800 | 8250 | 7400 | 8850 | 7750 | 7100 | 7650 | 7000 ₅ | 6550 ₁₀ |
| 560x135 | 40 | 11100 | 9850 | 9000 | 9850 | 9050 | 8450 | 8350 ₅ | 7900 ₅ | 7550 ₅ |
| | 75 | 10500 | 8800 | 7900 | 9450 | 8250 | 7550 | 8150 ₅ | 7450 ₁₀ | 6950 ₁₀ |
| 590x135 | 40 | 11750 | 10400 | 9500 | 10400 | 9550 | 8900 | 8800 ₅ | 8350 ₁₀ | 7950 ₁₀ |
| | 75 | 11100 | 9300 | 8300 | 10000 | 8700 | 7950 ₅ | 8600 ₁₀ | 7850 ₁₀ | 7300 ₁₅ |

NOTES:

1. D = member depth, B = member breadth, NS = not suitable.
2. The above table was based on a maximum DL of 40 (kg/m²), Total ground floor mass of 40 (kg/m²), Total wall mass of 37 kg/m², floor live load of 1.5 kPa, floor point load of 1.8 kN.
3. The above table was based on a wall height of 2700.
4. End bearing lengths = 42 mm at end supports and 58 mm at internal supports for continuous members. Subscript values indicate the minimum additional bearing length where required to be greater than 42 mm at end supports and 58 mm at internal supports.
5. Restraint value for slenderness calculations is 600 mm.
6. Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering

Floor bearers supporting single storey load bearing wall - sheet and tiled roof Continuous span

Floor mass - 40 kg/m²



EXAMPLE:

sheet roof - 40 kg/m²
 floor load width = 3500 mm
 roof load width = 1950 mm
 bearer span = 3000 mm (single span)

Enter single span table at 4800 mm in floor load width column, 4500 roof load width column, read down to a span equal to or greater than 3000 mm in the 40 kg/m² row.

ADOPT:

SmartLam GL 17C - 260 x 65

| Floor load width (mm) | Roof mass (kg/m ²) | 1200 | | | 2400 | | | 4800 | | |
|------------------------------|--------------------------------|--|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|---------------------|
| | | 1500 | 4500 | 7500 | 1500 | 4500 | 7500 | 1500 | 4500 | 7500 |
| Member size (GL17C) DxB (mm) | | Maximum recommended continuous span bearer span (mm) | | | | | | | | |
| 130x65 | 40 | 2850 | 2500 | 2250 | 2250 | 2100 | 1950 | 1700 | 1600 | 1550 |
| | 75 | 2700 | 2150 | 1800 | 2200 | 1900 | 1700 | 1650 | 1500 | 1450 |
| 165x65 | 40 | 3600 | 3200 | 2850 | 2850 | 2650 | 2500 | 2150 | 2050 | 1950 |
| | 75 | 3400 | 2750 | 2300 | 2750 | 2450 | 2150 | 2100 | 1950 | 1800 |
| 195x65 | 40 | 4100 | 3750 | 3350 | 3400 | 3150 | 2950 | 2500 | 2400 ₅ | 2300 ₅ |
| | 75 | 3900 | 3250 | 2750 | 3250 | 2900 | 2550 | 2450 | 2300 ₁₀ | 2150 ₁₅ |
| 230x65 | 40 | 4600 | 4200 | 3950 | 4000 | 3700 | 3450 | 2950 ₁₅ | 2850 ₁₅ | 2750 ₂₀ |
| | 75 | 4400 | 3800 | 3200 ₅ | 3850 | 3400 ₅ | 3000 ₁₅ | 2900 ₁₅ | 2700 ₂₀ | 2550 ₂₅ |
| 260x65 | 40 | 5050 | 4600 | 4350 | 4500 | 4200 ₅ | 3900 ₁₀ | 3350 ₂₅ | 3200 ₂₅ | 3100 ₃₀ |
| | 75 | 4850 | 4250 ₅ | 3650 ₁₅ | 4350 ₅ | 3850 ₁₀ | 3350 ₂₀ | 3300 ₂₅ | 3050 ₃₀ | 2850 ₃₅ |
| 295x65 | 40 | 5550 | 5100 | 4750 ₅ | 5100 ₁₀ | 4750 ₁₅ | 4450 ₂₀ | 3800 ₃₅ | 3650 ₄₀ | 3500 ₄₅ |
| | 75 | 5300 | 4700 ₁₀ | 4150 ₂₅ | 4950 ₁₀ | 4350 ₂₀ | 3800 ₃₅ | 3750 ₃₅ | 3450 ₄₅ | 3250 ₅₀ |
| 330x65 | 40 | 6050 | 5500 | 5150 ₁₀ | 5500 ₁₅ | 5200 ₂₅ | 4900 ₃₀ | 4250 ₄₅ | 4050 ₅₀ | 3900 ₅₅ |
| | 75 | 5800 | 5100 ₁₅ | 4600 ₃₅ | 5350 ₂₀ | 4850 ₃₀ | 4250 ₄₅ | 4150 ₅₀ | 3850 ₅₅ | 3600 ₆₅ |
| 360x65 | 40 | 6450 | 5900 ₅ | 5500 ₂₀ | 5900 ₂₀ | 5500 ₃₀ | 5250 ₃₅ | 4650 ₅₅ | 4450 ₆₀ | 4250 ₆₅ |
| | 75 | 6150 | 5400 ₂₀ | 5000 ₄₅ | 5700 ₂₅ | 5150 ₄₀ | 4650 ₅₅ | 4550 ₆₀ | 4200 ₇₀ | 3950 ₈₅ |
| 395x65 | 40 | 6900 | 6300 ₁₀ | 5900 ₂₅ | 6300 ₂₅ | 5900 ₃₅ | 5600 ₄₅ | 5100 ₇₀ | 4850 ₈₀ | 4700 ₉₀ |
| | 75 | 6600 | 5800 ₃₀ | 5350 ₅₅ | 6100 ₃₀ | 5550 ₄₅ | 5100 ₇₀ | 5000 ₇₅ | 4600 ₉₅ | 4350 ₁₀₅ |
| 425x65 | 40 | 7250 | 6650 ₁₅ | 6250 ₃₀ | 6650 ₃₀ | 6250 ₄₀ | 5950 ₅₀ | 5450 ₈₅ | 5250 ₁₀₀ | 5050 ₁₀₅ |
| | 75 | 6950 ₅ | 6150 ₃₅ | 5650 ₆₀ | 6450 ₃₅ | 5850 ₅₀ | 5450 ₈₅ | 5350 ₉₅ | 5000 ₁₀₅ | 4650 ₁₁₅ |
| 165x85 | 40 | 3850 | 3500 | 3200 | 3300 | 3050 | 2850 | 2450 | 2350 | 2250 |
| | 75 | 3700 | 3100 | 2650 | 3150 | 2800 | 2450 | 2400 | 2200 | 2050 |
| 195x85 | 40 | 4350 | 4000 | 3750 | 3850 | 3600 | 3350 | 2900 | 2750 | 2650 |
| | 75 | 4150 | 3650 | 3100 | 3750 | 3300 | 2900 | 2800 | 2600 | 2450 ₅ |
| 230x85 | 40 | 4900 | 4500 | 4200 | 4500 | 4200 | 3950 | 3400 ₅ | 3250 ₅ | 3100 ₁₀ |
| | 75 | 4700 | 4150 | 3700 | 4350 | 3900 | 3400 ₅ | 3350 ₅ | 3100 ₁₀ | 2900 ₁₅ |
| 260x85 | 40 | 5400 | 4950 | 4600 | 4950 | 4650 | 4400 | 3850 ₁₀ | 3650 ₁₅ | 3500 ₂₀ |
| | 75 | 5150 | 4550 | 4150 ₅ | 4800 | 4350 | 3850 ₁₀ | 3750 ₁₅ | 3500 ₂₀ | 3250 ₂₅ |
| 295x85 | 40 | 5900 | 5400 | 5100 | 5400 | 5100 | 4850 ₅ | 4350 ₂₀ | 4150 ₂₅ | 4000 ₃₀ |
| | 75 | 5650 | 5000 | 4600 ₁₅ | 5250 | 4750 ₁₀ | 4350 ₂₀ | 4250 ₂₅ | 3950 ₃₀ | 3700 ₃₅ |
| 330x85 | 40 | 6450 | 5900 | 5500 | 5900 | 5500 ₅ | 5250 ₁₅ | 4850 ₃₀ | 4650 ₃₅ | 4450 ₄₀ |
| | 75 | 6150 | 5450 | 5000 ₂₀ | 5700 ₅ | 5150 ₁₅ | 4800 ₃₀ | 4750 ₃₅ | 4400 ₄₀ | 4150 ₅₀ |
| 360x85 | 40 | 6850 | 6300 | 5900 ₅ | 6300 ₅ | 5900 ₁₀ | 5600 ₂₀ | 5300 ₄₀ | 5050 ₄₅ | 4850 ₅₀ |
| | 75 | 6550 | 5800 ₅ | 5300 ₂₅ | 6100 ₁₀ | 5500 ₂₀ | 5150 ₃₅ | 5200 ₄₅ | 4800 ₅₀ | 4500 ₆₀ |
| 395x85 | 40 | 7350 | 6750 | 6300 ₁₀ | 6750 ₁₀ | 6300 ₁₅ | 6000 ₂₅ | 5800 ₅₀ | 5550 ₅₅ | 5350 ₆₀ |
| | 75 | 7050 | 6200 ₁₀ | 5700 ₃₅ | 6550 ₁₅ | 5900 ₂₅ | 5500 ₄₅ | 5700 ₅₅ | 5300 ₆₅ | 4950 ₇₅ |
| 425x85 | 40 | 7750 | 7100 | 6650 ₁₀ | 7100 ₁₅ | 6650 ₂₀ | 6350 ₃₀ | 6250 ₆₀ | 6000 ₆₅ | 5750 ₇₅ |
| | 75 | 7400 | 6550 ₁₅ | 6000 ₄₀ | 6900 ₂₀ | 6250 ₃₀ | 5800 ₅₀ | 6100 ₆₅ | 5700 ₇₅ | 5300 ₉₅ |
| 460x85 | 40 | 8200 | 7550 ₅ | 7050 ₁₅ | 7550 ₂₀ | 7050 ₂₅ | 6700 ₃₅ | 6650 ₇₀ | 6400 ₈₀ | 6200 ₉₅ |
| | 75 | 7850 | 6950 ₂₀ | 6400 ₄₅ | 7300 ₂₅ | 6600 ₃₅ | 6150 ₆₀ | 6550 ₇₅ | 6100 ₉₅ | 5750 ₁₁₀ |
| 495x85 | 40 | 8650 | 7950 ₁₀ | 7450 ₂₀ | 7950 ₂₅ | 7450 ₃₀ | 7100 ₄₀ | 7050 ₈₅ | 6750 ₉₅ | 6500 ₁₀₅ |
| | 75 | 8300 | 7350 ₂₅ | 6750 ₅₀ | 7700 ₃₀ | 7000 ₄₅ | 6500 ₆₅ | 6900 ₉₀ | 6450 ₁₀₅ | 6100 ₁₂₀ |

Floor bearers supporting single storey load bearing wall - sheet and tiled roof Continuous span

| Floor load width (mm) | Roof mass (kg/m ²) | 1200 | | | 2400 | | | 4800 | | |
|---------------------------------|--------------------------------|--|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Roof load width (mm) | | 1500 | 4500 | 7500 | 1500 | 4500 | 7500 | 1500 | 4500 | 7500 |
| Member size (GL17C) DxB (mm) | | Maximum recommended continuous span bearer span (mm) | | | | | | | | |
| 230x115 | 40 | 5300 | 4850 | 4550 | 4850 | 4550 | 4300 | 3950 | 3750 | 3600 |
| | 75 | 5050 | 4450 | 4100 | 4700 | 4250 | 3950 | 3850 | 3600 | 3350 ₅ |
| 260x115 | 40 | 5800 | 5300 | 5000 | 5300 | 5000 | 4750 | 4450 | 4250 ₅ | 4100 ₅ |
| | 75 | 5550 | 4900 | 4500 | 5150 | 4650 | 4350 | 4350 ₅ | 4050 ₁₀ | 3800 ₁₅ |
| 295x115 | 40 | 6350 | 5850 | 5450 | 5850 | 5450 | 5200 | 5050 ₁₀ | 4850 ₁₅ | 4650 ₁₅ |
| | 75 | 6100 | 5350 | 4950 | 5650 | 5100 | 4750 ₅ | 4950 ₁₀ | 4600 ₂₀ | 4300 ₂₅ |
| 330x115 | 40 | 6900 | 6350 | 5950 | 6350 | 5950 | 5650 | 5600 ₂₀ | 5400 ₂₅ | 5200 ₂₅ |
| | 75 | 6600 | 5850 | 5350 ₅ | 6150 | 5550 | 5200 ₁₀ | 5500 ₂₀ | 5150 ₂₅ | 4800 ₃₅ |
| 360x115 | 40 | 7350 | 6750 | 6350 | 6750 | 6350 | 6000 | 6000 ₂₅ | 5750 ₃₀ | 5550 ₃₀ |
| | 75 | 7050 | 6250 | 5750 ₁₀ | 6550 | 5950 ₅ | 5550 ₂₀ | 5850 ₂₅ | 5500 ₃₅ | 5200 ₄₀ |
| 395x115 | 40 | 7850 | 7200 | 6800 | 7250 | 6800 | 6450 ₅ | 6400 ₃₀ | 6150 ₃₅ | 5950 ₄₀ |
| | 75 | 7550 | 6650 | 6150 ₁₅ | 7000 | 6350 ₁₀ | 5950 ₂₅ | 6300 ₃₀ | 5900 ₄₀ | 5550 ₅₀ |
| 425x115 | 40 | 8300 | 7600 | 7150 | 7650 | 7150 ₅ | 6800 ₁₀ | 6750 ₃₅ | 6500 ₄₀ | 6250 ₄₅ |
| | 75 | 7950 | 7050 | 6500 ₂₀ | 7400 | 6700 ₁₀ | 6250 ₃₀ | 6650 ₄₀ | 6200 ₄₅ | 5900 ₅₅ |
| 460x115 | 40 | 8800 | 8100 | 7600 | 8100 ₅ | 7600 ₁₀ | 7200 ₁₅ | 7150 ₄₀ | 6900 ₄₅ | 6650 ₅₀ |
| | 75 | 8450 | 7450 ₅ | 6850 ₂₅ | 7850 ₅ | 7100 ₁₅ | 6650 ₃₅ | 7050 ₄₅ | 6600 ₅₅ | 6250 ₆₅ |
| 495x115 | 40 | 9250 | 8500 | 8000 ₅ | 8550 ₅ | 8000 ₁₅ | 7600 ₂₀ | 7550 ₅₀ | 7250 ₅₅ | 7000 ₆₀ |
| | 75 | 8900 | 7900 ₁₀ | 7250 ₃₀ | 8300 ₁₀ | 7500 ₂₀ | 7000 ₄₀ | 7450 ₅₀ | 6950 ₆₀ | 6600 ₇₀ |
| 525x115 | 40 | 9650 | 8900 | 8350 ₁₀ | 8900 ₁₀ | 8350 ₁₅ | 7950 ₂₅ | 7900 ₅₅ | 7600 ₆₀ | 7350 ₆₅ |
| | 75 | 9300 | 8200 ₁₀ | 7600 ₃₅ | 8650 ₁₅ | 7850 ₂₅ | 7300 ₄₅ | 7750 ₅₅ | 7250 ₆₅ | 6900 ₈₅ |
| 560x115 | 40 | 10150 | 9350 | 8750 ₁₅ | 9350 ₁₅ | 8750 ₂₀ | 8350 ₃₀ | 8300 ₆₀ | 7950 ₆₅ | 7700 ₇₅ |
| | 75 | 9750 | 8600 ₁₅ | 7950 ₄₀ | 9050 ₁₅ | 8250 ₃₀ | 7700 ₅₀ | 8150 ₆₀ | 7600 ₇₅ | 7200 ₉₅ |
| 230x135 | 40 | 5500 | 5050 | 4700 | 5050 | 4750 | 4500 | 4250 | 4100 | 3900 |
| | 75 | 5250 | 4650 | 4250 | 4900 | 4450 | 4100 | 4200 | 3900 | 3650 |
| 260x135 | 40 | 6000 | 5500 | 5150 | 5500 | 5200 | 4900 | 4800 | 4600 | 4450 |
| | 75 | 5750 | 5100 | 4700 | 5350 | 4850 | 4500 | 4700 | 4400 ₅ | 4100 ₅ |
| 295x135 | 40 | 6600 | 6050 | 5700 | 6050 | 5700 | 5400 | 5350 ₅ | 5150 ₅ | 4950 ₁₀ |
| | 75 | 6350 | 5600 | 5150 | 5900 | 5350 | 4950 | 5250 ₅ | 4900 ₁₀ | 4650 ₁₅ |
| 330x135 | 40 | 7150 | 6550 | 6150 | 6600 | 6150 | 5850 | 5850 ₁₀ | 5600 ₁₅ | 5400 ₁₅ |
| | 75 | 6850 | 6050 | 5600 | 6400 | 5800 | 5400 ₅ | 5700 ₁₀ | 5350 ₁₅ | 5050 ₂₅ |
| 360x135 | 40 | 7600 | 7000 | 6600 | 7000 | 6600 | 6250 | 6200 ₁₅ | 5950 ₂₀ | 5750 ₂₀ |
| | 75 | 7300 | 6450 | 5950 | 6800 | 6150 | 5750 ₁₀ | 6100 ₁₅ | 5700 ₂₅ | 5400 ₃₀ |
| 395x135 | 40 | 8150 | 7500 | 7050 | 7500 | 7050 | 6700 | 6650 ₂₀ | 6400 ₂₅ | 6150 ₃₀ |
| | 75 | 7850 | 6950 | 6400 ₅ | 7300 | 6600 | 6150 ₁₅ | 6550 ₂₀ | 6100 ₃₀ | 5800 ₃₅ |
| 425x135 | 40 | 8600 | 7900 | 7450 | 7900 | 7450 | 7100 ₅ | 7050 ₂₅ | 6750 ₃₀ | 6500 ₃₅ |
| | 75 | 8250 | 7300 | 6750 ₁₀ | 7700 | 7000 ₅ | 6500 ₂₀ | 6900 ₂₅ | 6450 ₃₅ | 6100 ₄₀ |
| 460x135 | 40 | 9100 | 8400 | 7900 | 8400 | 7900 | 7500 ₅ | 7450 ₃₀ | 7150 ₃₅ | 6900 ₄₀ |
| | 75 | 8750 | 7750 | 7150 ₁₅ | 8150 | 7400 ₁₀ | 6900 ₂₅ | 7300 ₃₀ | 6850 ₄₀ | 6500 ₅₀ |
| 495x135 | 40 | 9600 | 8850 | 8300 | 8850 | 8300 ₅ | 7900 ₁₀ | 7850 ₃₅ | 7550 ₄₀ | 7300 ₄₅ |
| | 75 | 9250 | 8200 | 7550 ₂₀ | 8600 | 7800 ₁₀ | 7300 ₃₀ | 7700 ₄₀ | 7200 ₄₅ | 6850 ₅₅ |
| 525x135 | 40 | 10000 | 9250 | 8700 | 9250 | 8700 ₁₀ | 8250 ₁₅ | 8200 ₄₀ | 7900 ₄₅ | 7600 ₅₀ |
| | 75 | 9650 | 8550 ₅ | 7900 ₂₅ | 9000 ₅ | 8150 ₁₅ | 7600 ₃₅ | 8050 ₄₀ | 7550 ₅₀ | 7150 ₆₀ |
| 560x135 | 40 | 10500 | 9650 | 9100 ₅ | 9700 ₅ | 9100 ₁₀ | 8650 ₂₀ | 8600 ₄₅ | 8250 ₅₀ | 8000 ₅₅ |
| | 75 | 10100 | 8950 ₁₀ | 8250 ₂₅ | 9400 ₁₀ | 8550 ₂₀ | 8000 ₄₀ | 8450 ₅₀ | 7900 ₆₀ | 7500 ₇₀ |
| 590x135 | 40 | 10900 | 1005 ₀ | 9450 ₅ | 10050 ₁₀ | 9450 ₁₅ | 9000 ₂₀ | 8950 ₅₀ | 8600 ₅₅ | 8300 ₆₀ |
| | 75 | 10500 | 9300 ₁₀ | 8600 ₃₀ | 9750 ₁₀ | 8900 ₂₅ | 8300 ₄₀ | 8800 ₅₅ | 8200 ₆₅ | 7800 ₇₅ |

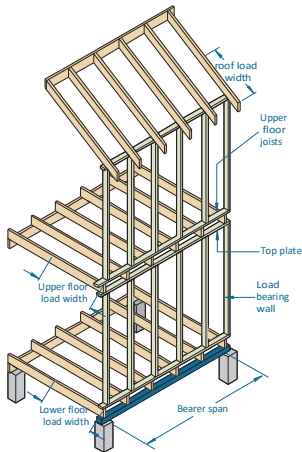
NOTES:

- D = member depth, B = member breadth, NS = not suitable.
- The above table was based on a maximum DL of 40 (kg/m²), Total ground floor mass of 40 (kg/m²), Total wall mass of 37 (kg/m²), floor live load of 1.5 kPa, floor point load of 1.8 kN
- The above table was based on a wall height of 2700.
- End bearing lengths = 42 mm at end supports and 58 mm at internal supports for continuous members. Subscript values indicate the minimum additional bearing length where required to be greater than 42 mm at end supports and 58 mm at internal supports.
- Restraint value for slenderness calculations is 600 mm.
- Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering

Floor bearers supporting two floors and roof - sheet and tiled roof

Single span

Floor mass - 40 kg/m²



EXAMPLE:

sheet roof - 40 kg/m²
 lower floor load width = 3500 mm
 upper floor load width = 1500 mm
 roof load width = 1950 mm
 bearer span = 3100 mm (single span)

Enter single span table at 3600 mm in lower floor load width column, 1800 mm in upper floor width column, 4500 mm roof load width column, read down to a span equal to or greater than 3100 mm in the 40 kg/m² row.

ADOPT:

SmartLam GL 17C - 260 x 65

| Lower floor load width (mm) | | 1800 | | | | | | 3600 | | | | | |
|------------------------------|--------------------------------|--|------|------|------|-------------------|--------------------|------|------|--------------------|-------------------|--------------------|--------------------|
| Upper floor load width (mm) | | 1800 | | | 3600 | | | 1800 | | | 3600 | | |
| Roof load width (mm) | | 1500 | 4500 | 7500 | 1500 | 4500 | 7500 | 1500 | 4500 | 7500 | 1500 | 4500 | 7500 |
| Member size (GL17C) DxB (mm) | Roof mass (kg/m ²) | Maximum recommended single span bearer span (mm) | | | | | | | | | | | |
| 130x65 | 40 | 1400 | 1300 | 1300 | 1300 | 1200 | 1200 | 1200 | 1100 | 1100 | 1100 | 1100 | 1100 |
| | 75 | 1300 | 1200 | 1200 | 1300 | 1200 | 1100 | 1200 | 1100 | 1000 | 1100 | 1100 | 1000 |
| 165x65 | 40 | 1800 | 1700 | 1600 | 1600 | 1600 | 1500 | 1500 | 1500 | 1400 | 1400 | 1400 | 1400 |
| | 75 | 1700 | 1600 | 1500 | 1600 | 1500 | 1400 | 1500 | 1400 | 1300 | 1400 | 1400 | 1300 |
| 195x65 | 40 | 2100 | 2000 | 1900 | 2000 | 1900 | 1800 | 1800 | 1800 | 1700 | 1700 | 1700 | 1600 |
| | 75 | 2100 | 1900 | 1800 | 1900 | 1800 | 1700 | 1800 | 1700 | 1600 | 1700 | 1600 | 1600 |
| 230x65 | 40 | 2500 | 2400 | 2300 | 2300 | 2300 | 2200 | 2200 | 2100 | 2000 | 2100 | 2000 | 1900 |
| | 75 | 2500 | 2300 | 2100 | 2300 | 2200 | 2000 | 2100 | 2000 | 1900 | 2000 | 1900 | 1900 |
| 260x65 | 40 | 2900 | 2700 | 2600 | 2700 | 2600 | 2500 | 2500 | 2400 | 2300 | 2300 | 2300 | 2200 |
| | 75 | 2800 | 2600 | 2400 | 2600 | 2500 | 2300 | 2400 | 2300 | 2200 | 2300 | 2200 | 2100 |
| 295x65 | 40 | 3300 | 3100 | 3000 | 3100 | 2900 | 2800 | 2800 | 2700 | 2700 | 2700 | 2600 | 2500 |
| | 75 | 3200 | 3000 | 2800 | 3000 | 2800 | 2700 | 2800 | 2600 | 2500 | 2700 | 2500 | 2400 |
| 330x65 | 40 | 3700 | 3500 | 3400 | 3500 | 3300 | 3200 | 3200 | 3100 | 3000 | 3000 | 2900 | 2900 |
| | 75 | 3600 | 3400 | 3100 | 3400 | 3200 | 3000 | 3100 | 3000 | 2800 | 3000 | 2800 | 2700 |
| 360x65 | 40 | 4100 | 3900 | 3700 | 3800 | 3600 | 3500 | 3500 | 3400 | 3300 | 3300 | 3200 | 3200 |
| | 75 | 4000 | 3700 | 3400 | 3700 | 3500 | 3300 | 3400 | 3300 | 3100 | 3300 | 3100 | 3000 |
| 395x65 | 40 | 4500 | 4300 | 4100 | 4200 | 4000 | 3900 | 3900 | 3700 | 3600 | 3700 | 3600 | 3500 |
| | 75 | 4400 | 4100 | 3800 | 4100 | 3900 | 3600 | 3800 | 3600 | 3400 | 3600 | 3500 | 3300 ₅ |
| 425x65 | 40 | 4900 | 4700 | 4500 | 4500 | 4400 | 4200 | 4200 | 4100 | 3900 | 4000 | 3900 | 3800 ₅ |
| | 75 | 4800 | 4400 | 4100 | 4400 | 4200 | 3900 ₅ | 4100 | 3900 | 3700 | 3900 | 3700 ₅ | 3600 ₁₀ |
| 460x65 | 40 | 5300 | 5000 | 4900 | 4800 | 4700 | 4500 ₅ | 4600 | 4400 | 4300 | 4300 ₅ | 4200 ₅ | 4100 ₁₀ |
| | 75 | 5200 | 4800 | 4500 | 4700 | 4500 ₅ | 4300 ₁₀ | 4500 | 4300 | 4100 ₁₀ | 4300 ₅ | 4100 ₁₀ | 3900 ₂₀ |
| 165x85 | 40 | 1900 | 1800 | 1800 | 1800 | 1700 | 1700 | 1700 | 1600 | 1600 | 1600 | 1500 | 1500 |
| | 75 | 1900 | 1800 | 1600 | 1800 | 1700 | 1600 | 1600 | 1600 | 1500 | 1600 | 1500 | 1400 |
| 195x85 | 40 | 2300 | 2200 | 2100 | 2200 | 2100 | 2000 | 2000 | 1900 | 1900 | 1900 | 1800 | 1800 |
| | 75 | 2300 | 2100 | 2000 | 2100 | 2000 | 1900 | 2000 | 1900 | 1800 | 1900 | 1800 | 1700 |
| 230x85 | 40 | 2800 | 2600 | 2500 | 2600 | 2500 | 2400 | 2400 | 2300 | 2200 | 2300 | 2200 | 2100 |
| | 75 | 2700 | 2500 | 2300 | 2500 | 2400 | 2200 | 2300 | 2200 | 2100 | 2200 | 2100 | 2000 |
| 260x85 | 40 | 3200 | 3000 | 2900 | 2900 | 2800 | 2700 | 2700 | 2600 | 2500 | 2600 | 2500 | 2400 |
| | 75 | 3100 | 2900 | 2700 | 2900 | 2700 | 2600 | 2700 | 2500 | 2400 | 2500 | 2400 | 2300 |
| 295x85 | 40 | 3600 | 3400 | 3300 | 3400 | 3200 | 3100 | 3100 | 3000 | 2900 | 3000 | 2900 | 2800 |
| | 75 | 3500 | 3300 | 3100 | 3300 | 3100 | 2900 | 3100 | 2900 | 2800 | 2900 | 2800 | 2700 |
| 330x85 | 40 | 4100 | 3900 | 3700 | 3800 | 3700 | 3500 | 3500 | 3400 | 3300 | 3300 | 3200 | 3200 |
| | 75 | 4000 | 3700 | 3500 | 3700 | 3500 | 3300 | 3400 | 3300 | 3100 | 3300 | 3100 | 3000 |
| 360x85 | 40 | 4500 | 4300 | 4100 | 4200 | 4000 | 3900 | 3800 | 3700 | 3600 | 3700 | 3600 | 3500 |
| | 75 | 4400 | 4100 | 3800 | 4100 | 3800 | 3600 | 3800 | 3600 | 3400 | 3600 | 3400 | 3300 |
| 395x85 | 40 | 5000 | 4700 | 4500 | 4600 | 4400 | 4300 | 4300 | 4100 | 4000 | 4100 | 3900 | 3800 |
| | 75 | 4900 | 4500 | 4200 | 4500 | 4200 | 4000 | 4200 | 4000 | 3800 | 4000 | 3800 | 3700 |
| 425x85 | 40 | 5300 | 5100 | 4900 | 4900 | 4700 | 4600 | 4600 | 4500 | 4300 | 4400 | 4300 | 4200 |
| | 75 | 5200 | 4800 | 4600 | 4800 | 4500 | 4300 | 4500 | 4300 | 4100 | 4300 | 4100 | 4000 |
| 460x85 | 40 | 5700 | 5500 | 5300 | 5200 | 5000 | 4900 | 5000 | 4900 | 4700 | 4800 | 4700 | 4500 |
| | 75 | 5600 | 5200 | 4900 | 5100 | 4900 | 4600 | 5000 | 4700 | 4500 | 4700 | 4500 | 4300 ₅ |
| 495x85 | 40 | 6100 | 5800 | 5600 | 5600 | 5400 | 5200 | 5400 | 5300 | 5100 | 5200 | 5000 | 4900 ₅ |
| | 75 | 6000 | 5600 | 5200 | 5500 | 5200 | 4900 ₅ | 5400 | 5100 | 4800 | 5100 | 4900 ₅ | 4700 ₁₀ |

Floor bearers supporting two floors and roof - sheet and tiled roof Single span (Cont'd)

| Lower floor load width (mm) | | 1800 | | | | | | 3600 | | | | | |
|------------------------------------|-----------------------------------|--|------|------|------|------|------|------|------|------|------|------|------|
| Upper floor load width (mm) | | 1800 | | | 3600 | | | 1800 | | | 3600 | | |
| Roof load width (mm) | | 1500 | 4500 | 7500 | 1500 | 4500 | 7500 | 1500 | 4500 | 7500 | 1500 | 4500 | 7500 |
| Member size (GL17C) DxB (mm) | Roof mass (kg/m ²) | Maximum recommended single span bearer span (mm) | | | | | | | | | | | |
| | | 230x115 | 40 | 3100 | 2900 | 2800 | 2900 | 2800 | 2700 | 2600 | 2600 | 2500 | 2500 |
| | 75 | 3000 | 2800 | 2600 | 2800 | 2600 | 2500 | 2600 | 2500 | 2400 | 2500 | 2400 | 2300 |
| 260x115 | 40 | 3500 | 3400 | 3200 | 3300 | 3100 | 3000 | 3000 | 2900 | 2800 | 2900 | 2800 | 2700 |
| | 75 | 3400 | 3200 | 3000 | 3200 | 3000 | 2800 | 3000 | 2800 | 2700 | 2800 | 2700 | 2600 |
| 295x115 | 40 | 4000 | 3800 | 3700 | 3800 | 3600 | 3500 | 3500 | 3300 | 3200 | 3300 | 3200 | 3100 |
| | 75 | 3900 | 3600 | 3400 | 3700 | 3400 | 3300 | 3400 | 3200 | 3100 | 3300 | 3100 | 3000 |
| 330x115 | 40 | 4600 | 4300 | 4200 | 4200 | 4100 | 3900 | 3900 | 3800 | 3700 | 3700 | 3600 | 3500 |
| | 75 | 4500 | 4100 | 3900 | 4200 | 3900 | 3700 | 3800 | 3600 | 3500 | 3700 | 3500 | 3300 |
| 360x115 | 40 | 5000 | 4800 | 4600 | 4600 | 4400 | 4300 | 4300 | 4200 | 4000 | 4100 | 4000 | 3900 |
| | 75 | 4900 | 4500 | 4200 | 4500 | 4300 | 4000 | 4200 | 4000 | 3800 | 4000 | 3800 | 3700 |
| 395x115 | 40 | 5400 | 5200 | 5000 | 5000 | 4800 | 4700 | 4700 | 4600 | 4500 | 4500 | 4400 | 4300 |
| | 75 | 5300 | 5000 | 4700 | 4900 | 4600 | 4400 | 4700 | 4400 | 4200 | 4500 | 4300 | 4100 |
| 425x115 | 40 | 5800 | 5600 | 5400 | 5300 | 5100 | 5000 | 5100 | 5000 | 4800 | 4900 | 4800 | 4600 |
| | 75 | 5700 | 5300 | 5000 | 5200 | 4900 | 4700 | 5100 | 4800 | 4600 | 4800 | 4600 | 4400 |
| 460x115 | 40 | 6300 | 6000 | 5800 | 5700 | 5500 | 5300 | 5600 | 5400 | 5300 | 5300 | 5200 | 5000 |
| | 75 | 6100 | 5700 | 5400 | 5600 | 5300 | 5100 | 5500 | 5200 | 5000 | 5200 | 5000 | 4800 |
| 495x115 | 40 | 6700 | 6400 | 6200 | 6100 | 5900 | 5700 | 6100 | 5900 | 5700 | 5700 | 5500 | 5400 |
| | 75 | 6600 | 6100 | 5700 | 6000 | 5700 | 5400 | 6000 | 5700 | 5400 | 5600 | 5400 | 5100 |
| 525x115 | 40 | 7100 | 6800 | 6500 | 6400 | 6200 | 6000 | 6400 | 6200 | 6000 | 6000 | 5800 | 5700 |
| | 75 | 6900 | 6400 | 6100 | 6300 | 6000 | 5700 | 6300 | 6000 | 5700 | 5900 | 5600 | 5400 |
| 230x135 | 40 | 3300 | 3100 | 3000 | 3000 | 2900 | 2800 | 2800 | 2700 | 2600 | 2700 | 2600 | 2500 |
| | 75 | 3200 | 2900 | 2800 | 3000 | 2800 | 2600 | 2800 | 2600 | 2500 | 2600 | 2500 | 2400 |
| 260x135 | 40 | 3700 | 3500 | 3400 | 3500 | 3300 | 3200 | 3200 | 3100 | 3000 | 3000 | 3000 | 2900 |
| | 75 | 3600 | 3400 | 3100 | 3400 | 3200 | 3000 | 3100 | 3000 | 2800 | 3000 | 2900 | 2700 |
| 295x135 | 40 | 4300 | 4100 | 3900 | 4000 | 3800 | 3700 | 3700 | 3500 | 3400 | 3500 | 3400 | 3300 |
| | 75 | 4200 | 3900 | 3600 | 3900 | 3600 | 3400 | 3600 | 3400 | 3300 | 3400 | 3300 | 3100 |
| 330x135 | 40 | 4800 | 4600 | 4400 | 4400 | 4300 | 4200 | 4100 | 4000 | 3900 | 3900 | 3800 | 3700 |
| | 75 | 4700 | 4400 | 4100 | 4400 | 4100 | 3900 | 4100 | 3900 | 3700 | 3900 | 3700 | 3500 |
| 360x135 | 40 | 5200 | 5000 | 4800 | 4800 | 4600 | 4500 | 4500 | 4400 | 4300 | 4300 | 4200 | 4100 |
| | 75 | 5100 | 4800 | 4500 | 4700 | 4500 | 4300 | 4500 | 4200 | 4000 | 4300 | 4100 | 3900 |
| 395x135 | 40 | 5700 | 5500 | 5300 | 5200 | 5000 | 4900 | 5000 | 4900 | 4700 | 4800 | 4700 | 4500 |
| | 75 | 5600 | 5200 | 4900 | 5100 | 4900 | 4600 | 5000 | 4700 | 4500 | 4700 | 4500 | 4300 |
| 425x135 | 40 | 6100 | 5800 | 5600 | 5600 | 5400 | 5200 | 5400 | 5300 | 5100 | 5200 | 5000 | 4900 |
| | 75 | 6000 | 5600 | 5200 | 5500 | 5200 | 4900 | 5400 | 5100 | 4800 | 5100 | 4900 | 4700 |
| 460x135 | 40 | 6600 | 6300 | 6000 | 6000 | 5800 | 5600 | 5900 | 5800 | 5600 | 5600 | 5400 | 5300 |
| | 75 | 6400 | 6000 | 5600 | 5900 | 5600 | 5300 | 5900 | 5500 | 5300 | 5500 | 5300 | 5100 |
| 495x135 | 40 | 7000 | 6700 | 6500 | 6400 | 6200 | 6000 | 6400 | 6200 | 6000 | 5900 | 5800 | 5700 |
| | 75 | 6900 | 6400 | 6000 | 6300 | 5900 | 5700 | 6300 | 5900 | 5700 | 5900 | 5600 | 5400 |
| 525x135 | 40 | 7500 | 7100 | 6800 | 6800 | 6500 | 6300 | 6800 | 6500 | 6300 | 6300 | 6100 | 6000 |
| | 75 | 7300 | 6800 | 6400 | 6700 | 6300 | 6000 | 6700 | 6300 | 6000 | 6200 | 5900 | 5700 |
| 560x135 | 40 | 7900 | 7600 | 7300 | 7200 | 6900 | 6700 | 7200 | 6900 | 6700 | 6700 | 6500 | 6300 |
| | 75 | 7800 | 7200 | 6800 | 7100 | 6700 | 6400 | 7100 | 6700 | 6400 | 6600 | 6300 | 6000 |
| 590x135 | 40 | 8400 | 8000 | 7700 | 7600 | 7300 | 7100 | 7600 | 7300 | 7100 | 7000 | 6800 | 6700 |
| | 75 | 8200 | 7600 | 7100 | 7500 | 7000 | 6700 | 7500 | 7000 | 6700 | 6900 | 6600 | 6300 |

NOTES:

- D = member depth, B = member breadth, NS = not suitable.
- The above table was based on total upper floor mass of 40 kg/m², total ground floor mass of 40 kg/m², floor live load of 1.5 kPa, floor point load of 1.8 kN, wall mass of 32 kg/m², & permanent floor live load of 0.5 kPa.
- The above table was based on a wall height of 5400 mm
- End bearing lengths = 70 mm at end supports and 90 mm at internal supports for continuous members. Subscript values indicate the minimum additional bearing length where required to be greater than 70 mm at end supports and 90 mm at internal supports.
- Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering

Floor bearers supporting two floors and roof - sheet and tiled roof Continuous span

| Lower floor load width (mm) | | 1800 | | | | | | 3600 | | | | | |
|------------------------------|--------------------------------|--|--------------------|---------------------|--------------------|---------------------|---------------------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Upper floor load width (mm) | | 1800 | | | 3600 | | | 1800 | | | 3600 | | |
| Roof load width (mm) | | 1500 | 4500 | 7500 | 1500 | 4500 | 7500 | 1500 | 4500 | 7500 | 1500 | 4500 | 7500 |
| Member size (GL17C) DxB (mm) | Roof mass (kg/m ²) | Maximum recommended continuous span bearer span (mm) | | | | | | | | | | | |
| 130x65 | 40 | 1800 | 1700 | 1600 | 1500 | 1400 | 1400 | 1500 | 1400 | 1400 | 1300 | 1300 | 1200 |
| | 75 | 1700 | 1500 | 1400 | 1500 | 1400 | 1300 | 1500 | 1400 | 1300 | 1300 | 1200 | 1100 |
| 165x65 | 40 | 2300 | 2100 | 2000 | 1900 | 1800 | 1800 | 1900 | 1800 | 1800 | 1700 | 1600 | 1600 |
| | 75 | 2200 | 2000 | 1800 | 1900 | 1700 | 1600 | 1900 | 1700 | 1600 | 1700 | 1600 | 1500 |
| 195x65 | 40 | 2700 | 2500 | 2400 | 2300 | 2200 | 2100 | 2300 | 2200 | 2100 | 2000 | 2000 | 1900 |
| | 75 | 2600 | 2300 | 2100 | 2300 | 2100 | 1900 | 2200 | 2100 | 1900 | 2000 | 1900 | 1700 |
| 230x65 | 40 | 3200 | 3000 | 2800 | 2700 | 2600 | 2500 | 2700 | 2600 | 2500 | 2400 | 2300 | 2200 ₅ |
| | 75 | 3100 | 2800 | 2500 | 2700 | 2400 | 2300 ₅ | 2600 | 2400 | 2300 ₅ | 2400 | 2200 ₅ | 2100 ₁₅ |
| 260x65 | 40 | 3600 | 3400 | 3200 | 3100 | 2900 ₅ | 2800 ₅ | 3000 | 2900 ₅ | 2800 ₅ | 2700 ₁₀ | 2600 ₁₅ | 2500 ₂₀ |
| | 75 | 3500 | 3100 | 2800 ₅ | 3000 | 2800 ₁₀ | 2600 ₂₀ | 3000 | 2800 ₁₀ | 2600 ₂₀ | 2700 ₁₀ | 2500 ₂₀ | 2300 ₃₀ |
| 295x65 | 40 | 4200 | 3900 ₅ | 3600 ₁₀ | 3500 ₁₀ | 3300 ₁₅ | 3200 ₂₀ | 3400 ₁₀ | 3300 ₁₅ | 3200 ₂₀ | 3100 ₂₅ | 3000 ₃₀ | 2900 ₃₅ |
| | 75 | 4000 | 3500 ₁₀ | 3200 ₂₀ | 3400 ₁₅ | 3100 ₂₅ | 2900 ₃₅ | 3400 ₁₅ | 3100 ₂₅ | 2900 ₃₅ | 3100 ₃₀ | 2800 ₃₅ | 2700 ₅₅ |
| 330x65 | 40 | 4700 ₁₀ | 4400 ₁₅ | 4100 ₂₀ | 4000 ₂₅ | 3700 ₃₀ | 3600 ₄₀ | 3800 ₂₅ | 3700 ₃₀ | 3600 ₄₀ | 3500 ₄₀ | 3300 ₅₀ | 3200 ₆₅ |
| | 75 | 4600 ₁₅ | 4000 ₂₅ | 3600 ₃₅ | 3900 ₃₀ | 3500 ₄₀ | 3200 ₆₅ | 3800 ₃₀ | 3500 ₄₀ | 3200 ₆₅ | 3400 ₄₅ | 3200 ₆₅ | 3000 ₇₅ |
| 360x65 | 40 | 5000 ₁₅ | 4800 ₃₀ | 4500 ₃₅ | 4400 ₄₀ | 4100 ₅₀ | 3900 ₆₅ | 4200 ₃₅ | 4000 ₄₅ | 3900 ₆₀ | 3800 ₆₅ | 3600 ₇₀ | 3500 ₇₅ |
| | 75 | 4900 ₂₀ | 4400 ₄₀ | 4000 ₆₀ | 4300 ₄₅ | 3900 ₆₅ | 3500 ₇₅ | 4100 ₄₀ | 3800 ₆₅ | 3500 ₇₅ | 3700 ₆₅ | 3500 ₈₀ | 3300 ₉₀ |
| 395x65 | 40 | 5400 ₂₅ | 5200 ₄₀ | 5000 ₆₀ | 4800 ₆₅ | 4600 ₇₅ | 4300 ₈₀ | 4600 ₆₅ | 4400 ₇₀ | 4200 ₇₅ | 4200 ₈₀ | 4000 ₈₅ | 3800 ₉₅ |
| | 75 | 5300 ₃₀ | 4900 ₆₅ | 4400 ₈₀ | 4700 ₆₅ | 4300 ₈₀ | 3900 ₉₅ | 4500 ₆₅ | 4200 ₈₀ | 3900 ₉₀ | 4100 ₈₅ | 3800 ₉₅ | 3600 ₁₁₀ |
| 425x65 | 40 | 5700 ₃₀ | 5500 ₅₅ | 5300 ₇₀ | 5200 ₈₀ | 5000 ₉₀ | 4700 ₉₅ | 5000 ₇₅ | 4800 ₈₀ | 4600 ₉₀ | 4500 ₉₅ | 4300 ₁₀₀ | 4100 ₁₀₅ |
| | 75 | 5600 ₄₀ | 5200 ₇₅ | 4800 ₉₀ | 5100 ₈₀ | 4600 ₉₅ | 4300 ₁₁₀ | 4900 ₈₀ | 4500 ₉₀ | 4200 ₁₀₅ | 4400 ₉₅ | 4100 ₁₁₀ | 3800 ₁₂₀ |
| 460x65 | 40 | 6000 ₄₀ | 5800 ₇₀ | 5600 ₈₀ | 5600 ₉₀ | 5400 ₁₀₀ | 5100 ₁₁₀ | 5400 ₉₀ | 5200 ₉₅ | 4900 ₁₀₅ | 4800 ₁₀₅ | 4600 ₁₁₅ | 4500 ₁₂₅ |
| | 75 | 5900 ₅₀ | 5600 ₈₅ | 5200 ₁₁₀ | 5500 ₉₅ | 5100 ₁₁₅ | 4700 ₁₃₀ | 5300 ₉₀ | 4900 ₁₀₅ | 4500 ₁₂₀ | 4800 ₁₁₀ | 4400 ₁₂₅ | 4200 ₁₄₀ |
| 165x85 | 40 | 2600 | 2400 | 2300 | 2200 | 2100 | 2000 | 2200 | 2100 | 2000 | 2000 | 1900 | 1800 |
| | 75 | 2500 | 2300 | 2000 | 2200 | 2000 | 1800 | 2200 | 2000 | 1800 | 1900 | 1800 | 1700 |
| 195x85 | 40 | 3100 | 2900 | 2700 | 2600 | 2500 | 2400 | 2600 | 2500 | 2400 | 2300 | 2200 | 2200 |
| | 75 | 3000 | 2700 | 2400 | 2600 | 2400 | 2200 | 2500 | 2400 | 2200 | 2300 | 2100 | 2000 |
| 230x85 | 40 | 3700 | 3400 | 3200 | 3100 | 3000 | 2800 | 3100 | 3000 | 2800 | 2800 | 2700 | 2600 |
| | 75 | 3500 | 3200 | 2900 | 3000 | 2800 | 2600 | 3000 | 2800 | 2600 | 2700 | 2500 | 2400 |
| 260x85 | 40 | 4200 | 3900 | 3600 | 3500 | 3400 | 3200 | 3500 | 3300 | 3200 | 3100 | 3000 | 2900 ₅ |
| | 75 | 4100 | 3600 | 3200 | 3400 | 3200 | 2900 ₅ | 3400 | 3200 | 2900 ₅ | 3100 | 2900 ₅ | 2700 ₁₀ |
| 295x85 | 40 | 4600 | 4400 | 4200 | 4100 | 3800 ₅ | 3600 ₅ | 3900 | 3800 ₅ | 3600 ₅ | 3600 ₁₀ | 3400 ₁₅ | 3300 ₂₀ |
| | 75 | 4500 | 4100 | 3700 ₅ | 4000 | 3600 ₁₀ | 3300 ₁₅ | 3900 | 3600 ₁₀ | 3300 ₁₅ | 3500 ₁₀ | 3200 ₂₀ | 3000 ₃₀ |
| 330x85 | 40 | 5000 | 4800 | 4700 ₁₀ | 4600 ₁₀ | 4300 ₁₅ | 4100 ₂₀ | 4400 ₁₀ | 4200 ₁₅ | 4100 ₂₀ | 4000 ₂₅ | 3800 ₂₅ | 3700 ₃₅ |
| | 75 | 4900 | 4600 ₁₀ | 4200 ₂₀ | 4500 ₁₅ | 4100 ₂₅ | 3700 ₃₀ | 4300 ₁₀ | 4000 ₂₀ | 3700 ₃₀ | 3900 ₂₅ | 3600 ₃₅ | 3400 ₄₅ |
| 360x85 | 40 | 5300 | 5200 ₅ | 5000 ₁₅ | 5000 ₂₀ | 4800 ₃₀ | 4500 ₃₅ | 4800 ₂₀ | 4600 ₂₅ | 4400 ₃₀ | 4300 ₃₅ | 4200 ₄₀ | 4000 ₅₀ |
| | 75 | 5300 | 5000 ₂₀ | 4600 ₃₅ | 4900 ₂₅ | 4500 ₃₅ | 4100 ₅₅ | 4700 ₂₀ | 4400 ₃₅ | 4000 ₄₅ | 4300 ₃₅ | 4000 ₅₅ | 3700 ₆₅ |
| 395x85 | 40 | 5700 | 5500 ₁₅ | 5400 ₂₅ | 5300 ₃₀ | 5200 ₄₀ | 5000 ₆₀ | 5300 ₃₅ | 5100 ₄₀ | 4900 ₅₀ | 4800 ₅₅ | 4600 ₆₅ | 4400 ₇₀ |
| | 75 | 5600 ₅ | 5300 ₃₀ | 5100 ₅₅ | 5200 ₃₀ | 5000 ₆₅ | 4600 ₇₅ | 5200 ₃₅ | 4800 ₅₀ | 4400 ₇₀ | 4700 ₆₀ | 4300 ₇₀ | 4100 ₈₅ |
| 425x85 | 40 | 6100 ₁₀ | 5800 ₂₀ | 5700 ₃₀ | 5600 ₃₅ | 5500 ₅₅ | 5300 ₇₀ | 5600 ₄₀ | 5500 ₆₀ | 5200 ₆₅ | 5100 ₇₀ | 4900 ₇₅ | 4700 ₈₀ |
| | 75 | 6000 ₁₅ | 5600 ₃₅ | 5300 ₆₅ | 5500 ₄₀ | 5300 ₇₅ | 4900 ₉₀ | 5500 ₅₀ | 5100 ₇₀ | 4800 ₈₀ | 5000 ₇₅ | 4700 ₈₅ | 4400 ₉₅ |
| 460x85 | 40 | 6400 ₁₅ | 6200 ₂₅ | 6000 ₄₀ | 6000 ₅₅ | 5800 ₇₀ | 5700 ₈₀ | 5900 ₆₀ | 5800 ₇₀ | 5600 ₈₀ | 5500 ₈₅ | 5300 ₉₀ | 5100 ₉₅ |
| | 75 | 6300 ₂₀ | 6000 ₄₅ | 5700 ₇₅ | 5900 ₆₅ | 5600 ₈₅ | 5400 ₁₀₅ | 5900 ₆₅ | 5600 ₈₀ | 5200 ₉₅ | 5400 ₈₅ | 5100 ₁₀₀ | 4700 ₁₁₀ |
| 495x85 | 40 | 6800 ₂₀ | 6600 ₃₅ | 6300 ₅₅ | 6300 ₆₅ | 6100 ₈₀ | 6000 ₉₀ | 6300 ₇₀ | 6100 ₈₀ | 6000 ₉₀ | 5900 ₁₀₀ | 5700 ₁₀₅ | 5500 ₁₁₀ |
| | 75 | 6700 ₂₅ | 6300 ₆₅ | 6000 ₈₅ | 6200 ₇₀ | 5900 ₉₅ | 5700 ₁₁₅ | 6200 ₇₅ | 5900 ₉₅ | 5600 ₁₁₀ | 5800 ₁₀₀ | 5400 ₁₁₅ | 5100 ₁₂₅ |

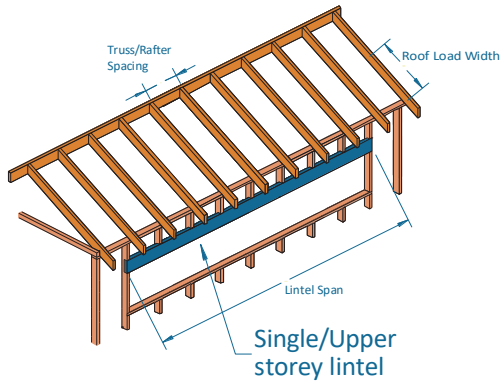
Floor bearers supporting two floors and roof - sheet and tiled roof Continuous span (Cont'd)

| Lower floor load width (mm) | | 1800 | | | | | | 3600 | | | | | |
|------------------------------|--------------------------------|--|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| Upper floor load width (mm) | | 1800 | | | 3600 | | | 1800 | | | 3600 | | |
| Roof load width (mm) | | 1500 | 4500 | 7500 | 1500 | 4500 | 7500 | 1500 | 4500 | 7500 | 1500 | 4500 | 7500 |
| Member size (GL17C) DxB (mm) | Roof mass (kg/m ²) | Maximum recommended continuous span bearer span (mm) | | | | | | | | | | | |
| 230x115 | 40 | 4100 | 4000 | 3800 | 3600 | 3400 | 3300 | 3600 | 3400 | 3300 | 3200 | 3100 | 3000 |
| | 75 | 4000 | 3700 | 3300 | 3500 | 3200 | 3000 | 3500 | 3200 | 3000 | 3200 | 2900 | 2800 |
| 260x115 | 40 | 4500 | 4400 | 4200 | 4200 | 3900 | 3700 | 4000 | 3900 | 3700 | 3600 | 3500 | 3400 |
| | 75 | 4400 | 4200 | 3800 | 4100 | 3700 | 3400 | 4000 | 3700 | 3400 | 3600 | 3300 | 3100 |
| 295x115 | 40 | 5000 | 4800 | 4600 | 4600 | 4500 | 4300 | 4600 | 4400 | 4200 | 4100 | 4000 | 3800 |
| | 75 | 4900 | 4600 | 4400 | 4500 | 4200 | 3900 | 4500 | 4200 | 3900 | 4100 | 3800 ₅ | 3500 ₁₀ |
| 330x115 | 40 | 5400 | 5200 | 5000 | 5000 | 4900 | 4700 ₅ | 5000 | 4900 | 4700 ₅ | 4600 ₅ | 4400 ₁₀ | 4300 ₁₅ |
| | 75 | 5300 | 5000 | 4800 | 4900 | 4700 ₅ | 4400 ₁₅ | 4900 | 4600 ₅ | 4300 ₁₀ | 4500 ₅ | 4200 ₁₅ | 4000 ₂₅ |
| 360x115 | 40 | 5800 | 5600 | 5400 | 5300 | 5200 ₅ | 5100 ₁₀ | 5300 | 5200 ₅ | 5100 ₁₀ | 5000 ₁₅ | 4800 ₂₀ | 4600 ₂₅ |
| | 75 | 5700 | 5300 | 5100 ₁₀ | 5300 | 5000 ₁₅ | 4800 ₃₀ | 5300 | 5000 ₁₅ | 4700 ₂₀ | 4900 ₁₅ | 4600 ₂₅ | 4300 ₃₅ |
| 395x115 | 40 | 6200 | 6000 | 5800 | 5700 ₅ | 5600 ₁₀ | 5400 ₂₀ | 5700 ₅ | 5600 ₁₀ | 5400 ₂₀ | 5400 ₂₅ | 5300 ₃₀ | 5100 ₃₅ |
| | 75 | 6100 | 5700 | 5400 ₁₅ | 5600 ₅ | 5400 ₂₀ | 5200 ₃₅ | 5700 ₁₀ | 5400 ₂₅ | 5200 ₃₅ | 5300 ₂₅ | 5000 ₄₀ | 4700 ₅₅ |
| 425x115 | 40 | 6500 | 6300 | 6100 ₅ | 6000 ₁₀ | 5900 ₂₀ | 5700 ₂₅ | 6000 ₁₀ | 5900 ₂₀ | 5700 ₂₅ | 5700 ₃₀ | 5600 ₄₀ | 5500 ₅₅ |
| | 75 | 6400 | 6000 ₁₀ | 5800 ₂₅ | 6000 ₁₅ | 5700 ₃₀ | 5500 ₅₀ | 6000 ₁₅ | 5700 ₃₀ | 5500 ₅₀ | 5600 ₃₅ | 5400 ₆₀ | 5100 ₇₀ |
| 460x115 | 40 | 6900 | 6700 | 6500 ₁₀ | 6400 ₁₅ | 6200 ₂₅ | 6100 ₃₅ | 6400 ₂₀ | 6200 ₂₅ | 6100 ₃₅ | 6000 ₄₀ | 5900 ₆₀ | 5800 ₇₀ |
| | 75 | 6800 | 6400 ₁₅ | 6100 ₃₀ | 6300 ₂₀ | 6000 ₄₀ | 5800 ₆₅ | 6300 ₂₀ | 6000 ₄₀ | 5800 ₆₅ | 6000 ₄₅ | 5800 ₇₀ | 5500 ₈₅ |
| 495x115 | 40 | 7300 | 7100 ₁₀ | 6800 ₂₀ | 6800 ₂₅ | 6600 ₃₅ | 6400 ₄₅ | 6800 ₂₅ | 6600 ₃₅ | 6400 ₄₅ | 6400 ₅₅ | 6300 ₇₀ | 6100 ₈₀ |
| | 75 | 7200 | 6800 ₂₀ | 6500 ₄₀ | 6700 ₂₅ | 6400 ₅₅ | 6100 ₇₅ | 6700 ₃₀ | 6400 ₅₅ | 6100 ₇₅ | 6300 ₆₀ | 6100 ₈₀ | 5900 ₉₅ |
| 525x115 | 40 | 7600 | 7400 ₁₅ | 7100 ₂₅ | 7100 ₃₀ | 6900 ₄₀ | 6700 ₆₀ | 7100 ₃₅ | 6900 ₄₀ | 6700 ₆₀ | 6700 ₆₅ | 6500 ₇₅ | 6400 ₈₅ |
| | 75 | 7500 ₅ | 7100 ₂₅ | 6700 ₅₅ | 7000 ₃₅ | 6700 ₆₅ | 6400 ₈₀ | 7000 ₃₅ | 6700 ₆₅ | 6400 ₈₀ | 6600 ₇₀ | 6400 ₉₀ | 6200 ₁₀₅ |
| 230x135 | 40 | 4300 | 4100 | 4000 | 4000 | 3800 | 3600 | 3900 | 3700 | 3600 | 3500 | 3300 | 3200 |
| | 75 | 4200 | 4000 | 3600 | 3900 | 3500 | 3300 | 3800 | 3500 | 3300 | 3400 | 3200 | 3000 |
| 260x135 | 40 | 4700 | 4500 | 4400 | 4300 | 4200 | 4100 | 4300 | 4200 | 4000 | 3900 | 3800 | 3600 |
| | 75 | 4600 | 4300 | 4100 | 4300 | 4000 | 3700 | 4300 | 4000 | 3700 | 3900 | 3600 | 3400 |
| 295x135 | 40 | 5200 | 5000 | 4800 | 4800 | 4700 | 4500 | 4800 | 4700 | 4500 | 4500 | 4300 | 4100 |
| | 75 | 5100 | 4800 | 4600 | 4700 | 4500 | 4300 | 4700 | 4500 | 4200 | 4400 | 4100 | 3800 |
| 330x135 | 40 | 5600 | 5400 | 5200 | 5200 | 5100 | 4900 | 5200 | 5100 | 4900 | 4900 | 4800 | 4600 ₅ |
| | 75 | 5500 | 5200 | 5000 | 5100 | 4900 | 4700 ₅ | 5100 | 4900 | 4700 ₅ | 4900 | 4600 ₅ | 4300 ₁₅ |
| 360x135 | 40 | 6000 | 5800 | 5600 | 5600 | 5400 | 5300 | 5500 | 5400 | 5300 | 5200 ₅ | 5100 ₁₀ | 5000 ₁₅ |
| | 75 | 5900 | 5500 | 5300 | 5500 | 5200 | 5000 ₁₅ | 5500 | 5200 | 5000 ₁₅ | 5200 ₅ | 5000 ₁₅ | 4700 ₂₅ |
| 395x135 | 40 | 6400 | 6200 | 6000 | 6000 | 5800 | 5700 ₅ | 5900 | 5800 | 5700 ₅ | 5600 ₁₀ | 5500 ₁₅ | 5400 ₂₅ |
| | 75 | 6300 | 5900 | 5700 ₅ | 5900 | 5600 ₁₀ | 5400 ₂₀ | 5900 | 5600 ₁₀ | 5400 ₂₀ | 5600 ₁₅ | 5400 ₂₅ | 5100 ₃₅ |
| 425x135 | 40 | 6800 | 6500 | 6300 | 6300 | 6100 ₅ | 6000 ₁₀ | 6300 | 6100 ₅ | 6000 ₁₀ | 5900 ₁₅ | 5800 ₂₅ | 5700 ₃₀ |
| | 75 | 6700 | 6300 | 6000 ₁₀ | 6200 | 5900 ₁₅ | 5700 ₃₀ | 6200 | 5900 ₁₅ | 5700 ₃₀ | 5900 ₂₀ | 5700 ₃₅ | 5500 ₅₀ |
| 460x135 | 40 | 7200 | 6900 | 6700 | 6700 ₅ | 6500 ₁₀ | 6300 ₂₀ | 6700 ₅ | 6500 ₁₀ | 6300 ₂₀ | 6300 ₂₅ | 6200 ₃₀ | 6000 ₄₀ |
| | 75 | 7100 | 6700 | 6400 ₁₅ | 6600 ₅ | 6300 ₂₀ | 6100 ₃₅ | 6600 ₁₀ | 6300 ₂₀ | 6100 ₃₅ | 6200 ₂₅ | 6000 ₄₅ | 5800 ₆₅ |
| 495x135 | 40 | 7600 | 7300 | 7100 ₅ | 7000 ₁₀ | 6900 ₂₀ | 6700 ₂₅ | 7000 ₁₀ | 6900 ₂₀ | 6700 ₂₅ | 6600 ₃₀ | 6500 ₄₀ | 6400 ₅₅ |
| | 75 | 7500 | 7000 ₁₀ | 6700 ₂₅ | 6900 ₁₀ | 6600 ₃₀ | 6400 ₅₀ | 7000 ₁₅ | 6600 ₃₀ | 6400 ₅₀ | 6600 ₃₅ | 6300 ₆₀ | 6100 ₇₅ |
| 525x135 | 40 | 7900 | 7700 | 7400 ₁₀ | 7400 ₁₅ | 7200 ₂₅ | 7000 ₃₀ | 7300 ₁₅ | 7200 ₂₅ | 7000 ₃₀ | 6900 ₃₅ | 6800 ₅₀ | 6700 ₆₅ |
| | 75 | 7800 | 7400 ₁₅ | 7000 ₃₀ | 7300 ₂₀ | 6900 ₃₅ | 6700 ₆₅ | 7300 ₂₀ | 6900 ₃₅ | 6700 ₆₅ | 6900 ₄₅ | 6600 ₇₀ | 6400 ₈₅ |
| 560x135 | 40 | 8300 | 8000 ₅ | 7800 ₁₅ | 7700 ₂₀ | 7500 ₃₀ | 7300 ₄₀ | 7700 ₂₀ | 7500 ₃₀ | 7300 ₄₀ | 7300 ₅₀ | 7100 ₆₅ | 7000 ₇₅ |
| | 75 | 8200 | 7700 ₂₀ | 7400 ₃₅ | 7600 ₂₅ | 7300 ₄₅ | 7000 ₇₀ | 7600 ₂₅ | 7300 ₄₅ | 7000 ₇₀ | 7200 ₅₅ | 7000 ₇₅ | 6700 ₉₅ |
| 590x135 | 40 | 8600 | 8400 ₁₀ | 8100 ₂₀ | 8000 ₂₅ | 7800 ₃₅ | 7600 ₅₀ | 8000 ₂₅ | 7800 ₃₅ | 7600 ₅₀ | 7600 ₆₀ | 7400 ₇₀ | 7300 ₈₀ |
| | 75 | 8500 ₅ | 8000 ₂₅ | 7700 ₄₅ | 7900 ₃₀ | 7600 ₅₅ | 7300 ₇₅ | 7900 ₃₀ | 7600 ₅₅ | 7300 ₇₅ | 7500 ₆₅ | 7200 ₈₅ | 7000 ₁₀₀ |

NOTES:

- D = member depth, B = member breadth, NS = not suitable.
- The above table was based on total upper floor mass of 40 kg/m², total ground floor mass of 40 kg/m², floor live load of 1.5 kPa, floor point load of 1.8 kN, wall mass of 32 kg/m², & permanent floor live load of 0.5 kPa.
- The above table was based on a wall height of 5400 mm
- End bearing lengths = 70 mm at end supports and 90 mm at internal supports for continuous members. Subscript values indicate the minimum additional bearing length where required to be greater than 70 mm at end supports and 90 mm at internal supports.
- Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering

Single span lintels in single/upper storey walls AS 4055 Classification N1, N2, N3 & N4



EXAMPLE:

wind speed = N3
sheet roof - 40 kg/m²
roof load width = 3900 mm
rafter/truss spacing = 600 mm
lintel span = 3500 mm

Enter span table at 4500 roof load width column, rafter/truss spacing 600 mm, and read down to a span equal to or greater than 3500 mm

ADOPT:

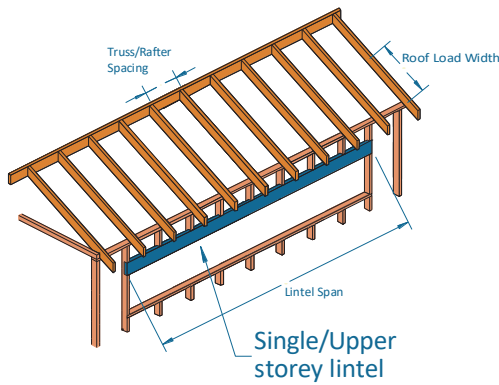
SmartLam GL 17C - 260 x 65

| Roof load width (mm) | | 1500 | | 3000 | | 4500 | | 6000 | | 7500 | |
|---------------------------------|-----------------------------------|--|-------|-------|-------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Rafter/tuss spacing (mm) | | 600 | 1200 | 600 | 1200 | 600 | 1200 | 600 | 1200 | 600 | 1200 |
| Member size (GL17C) DxB (mm) | Roof mass (kg/m ²) | Maximum recommended Lintel span (mm) | | | | | | | | | |
| | | Single span - Wind speed N1, N2, N3 & N4 | | | | | | | | | |
| 130x65 | 40 | 3400 | 3350 | 2850 | 2850 | 2500 | 2450 | 2150 | 2050 | 1900 | 1650 |
| | 90 | 2750 | 2750 | 2150 | 2150 | 1900 | 1900 | 1700 | 1550 | 1550 | 1250 |
| 165x65 | 40 | 4150 | 4150 | 3450 | 3400 | 3100 | 3050 | 2750 | 2700 | 2500 | 2350 |
| | 90 | 3350 | 3300 | 2750 | 2800 | 2400 | 2450 | 2200 | 2150 | 2050 | 2000 |
| 195x65 | 40 | 4800 | 4800 | 3950 | 3950 | 3550 | 3500 | 3250 | 3150 | 2900 | 2800 |
| | 90 | 3850 | 3800 | 3200 | 3150 | 2850 | 2850 | 2650 | 2700 | 2400 | 2450 ₅ |
| 230x65 | 40 | 5550 | 5550 | 4600 | 4550 | 4100 | 4050 | 3750 | 3700 | 3500 | 3300 |
| | 90 | 4450 | 4400 | 3650 | 3600 | 3250 | 3250 | 3000 | 3000 | 2850 | 2850 ₅ |
| 260x65 | 40 | 6200 | 6200 | 5100 | 5100 | 4550 | 4500 | 4200 | 4200 | 3900 | 3750 |
| | 90 | 4950 | 4950 | 4050 | 4050 | 3600 | 3600 | 3350 | 3300 | 3150 | 3100 ₅ |
| 295x65 | 40 | 7000 | 7000 | 5750 | 5700 | 5100 | 5100 | 4700 | 4650 | 4400 | 4400 ₅ |
| | 90 | 5550 | 5500 | 4550 | 4500 | 4050 | 4000 | 3700 | 3700 | 3500 ₁₀ | 3450 ₅ |
| 330x65 | 40 | 7850 | 7850 | 6350 | 6350 | 5650 | 5600 | 5200 | 5200 ₅ | 4850 ₁₀ | 4850 ₁₅ |
| | 90 | 6150 | 6150 | 5000 | 5000 | 4450 | 4450 | 4100 ₅ | 4100 ₁₀ | 3850 ₁₀ | 3800 ₁₀ |
| 360x65 | 40 | 8550 | 8550 | 6950 | 6900 | 6150 | 6100 | 5600 ₅ | 5600 ₅ | 5250 ₁₀ | 5250 ₁₅ |
| | 90 | 6700 | 6700 | 5400 | 5400 | 4800 | 4800 ₅ | 4400 ₅ | 4400 ₁₀ | 4150 ₁₅ | 4150 ₂₀ |
| 395x65 | 40 | 9450 | 9400 | 7600 | 7600 | 6700 | 6700 ₅ | 6150 ₁₀ | 6100 ₅ | 5750 ₁₀ | 5700 ₁₅ |
| | 90 | 7350 | 7300 | 5950 | 5900 | 5250 | 5250 ₅ | 4800 ₁₀ | 4750 ₅ | 4500 ₁₅ | 4500 ₂₀ |
| 425x65 | 40 | 10200 | 10200 | 8200 | 8200 | 7200 ₅ | 7200 ₅ | 6600 ₁₀ | 6600 ₁₀ | 6150 ₂₀ | 6100 ₁₅ |
| | 90 | 7900 | 7900 | 6350 | 6350 | 5600 ₅ | 5600 ₅ | 5150 ₁₀ | 5100 ₁₅ | 4800 ₂₀ | 4750 ₁₅ |
| 460x65 | 40 | 11150 | 11100 | 8900 | 8900 | 7800 ₅ | 7800 ₅ | 7150 ₁₀ | 7100 ₁₅ | 6650 ₂₀ | 6650 ₁₅ |
| | 90 | 8600 | 8550 | 6850 | 6850 | 6050 ₁₀ | 6000 ₅ | 5500 ₁₅ | 5500 ₂₀ | 5150 ₂₀ | 5150 ₃₀ |
| 495x65 | 40 | 11950 | 11900 | 9650 | 9650 | 8450 ₁₀ | 8400 ₁₀ | 7650 ₁₅ | 7650 ₂₀ | 7150 ₂₀ | 7100 ₂₅ |
| | 90 | 9300 | 9300 | 7400 | 7350 | 6500 ₁₀ | 6450 ₅ | 5950 ₁₅ | 5900 ₂₀ | 5500 ₂₅ | 5500 ₃₀ |
| 130x85 | 40 | 3650 | 3600 | 3050 | 3000 | 2750 | 2750 | 2500 | 2400 | 2200 | 2100 |
| | 90 | 2950 | 2950 | 2400 | 2450 | 2100 | 2050 | 1850 | 1850 | 1700 | 1600 |
| 165x85 | 40 | 4450 | 4450 | 3700 | 3650 | 3300 | 3300 | 3050 | 3050 | 2800 | 2750 |
| | 90 | 3600 | 3550 | 2950 | 2950 | 2650 | 2700 | 2400 | 2450 | 2250 | 2200 |
| 195x85 | 40 | 5150 | 5150 | 4250 | 4250 | 3850 | 3800 | 3550 | 3500 | 3350 | 3200 |
| | 90 | 4150 | 4100 | 3400 | 3400 | 3050 | 3050 | 2850 | 2850 | 2650 | 2700 |
| 230x85 | 40 | 6000 | 5950 | 4950 | 4950 | 4400 | 4400 | 4050 | 4050 | 3800 | 3800 |
| | 90 | 4750 | 4750 | 3950 | 3900 | 3500 | 3450 | 3250 | 3200 | 3050 | 3050 |
| 260x85 | 40 | 6700 | 6700 | 5500 | 5500 | 4900 | 4900 | 4500 | 4500 | 4250 | 4250 |
| | 90 | 5300 | 5350 | 4350 | 4350 | 3900 | 3850 | 3600 | 3550 | 3400 | 3350 |
| 295x85 | 40 | 7600 | 7600 | 6200 | 6200 | 5500 | 5500 | 5050 | 5050 | 4750 | 4700 |
| | 90 | 6000 | 5950 | 4900 | 4850 | 4350 | 4350 | 4000 | 4000 | 3750 | 3750 |
| 330x85 | 40 | 8500 | 8450 | 6900 | 6900 | 6100 | 6100 | 5600 | 5600 | 5250 | 5250 ₅ |
| | 90 | 6650 | 6650 | 5400 | 5400 | 4800 | 4800 | 4400 | 4400 | 4150 ₅ | 4150 ₁₀ |
| 360x85 | 40 | 9250 | 9250 | 7550 | 7500 | 6650 | 6650 | 6100 | 6050 | 5700 | 5650 ₅ |
| | 90 | 7250 | 7250 | 5900 | 5850 | 5200 | 5200 | 4800 | 4750 | 4500 | 4450 ₅ |
| 395x85 | 40 | 10200 | 10200 | 8300 | 8250 | 7300 | 7250 | 6650 | 6650 ₅ | 6200 ₅ | 6200 ₅ |
| | 90 | 7950 | 7950 | 6400 | 6400 | 5650 | 5650 | 5200 | 5200 ₅ | 4900 ₁₀ | 4850 ₁₅ |
| 425x85 | 40 | 11100 | 11050 | 8950 | 8900 | 7850 | 7850 | 7200 ₅ | 7150 | 6700 ₁₀ | 6700 ₁₅ |
| | 90 | 8600 | 8600 | 6900 | 6900 | 6100 | 6050 | 5550 ₅ | 5550 ₁₀ | 5200 ₁₀ | 5200 ₁₅ |
| 460x85 | 40 | 12000 | 12000 | 9750 | 9700 | 8550 | 8500 | 7750 ₅ | 7750 ₁₀ | 7250 ₁₅ | 7200 ₁₅ |
| | 90 | 9350 | 9350 | 7500 | 7450 | 6550 | 6550 | 6000 ₁₀ | 5950 ₅ | 5600 ₁₅ | 5600 ₂₀ |
| 495x85 | 40 | 12000 | 12000 | 10550 | 10500 | 9200 | 9200 ₅ | 8400 ₁₀ | 8350 ₁₀ | 7800 ₁₅ | 7800 ₁₅ |
| | 90 | 10150 | 10150 | 8050 | 8050 | 7050 | 7050 ₅ | 6450 ₁₀ | 6450 ₅ | 6000 ₂₀ | 6000 ₁₅ |

NOTES:

1. D = member depth, B = member breadth, NS = not suitable.
2. Minimum bearing length = 35 mm at end supports. Subscript values indicate the minimum additional bearing length where required to be greater than 35 mm.
3. Restraint value for slenderness calculations is 600 mm.
4. Not all sizes of SmartLam GL17 in this table are stocked in each state. Please check with your supplier before ordering

Single span lintels in single/upper storey walls AS 4055 classification C1, C2 and C3



EXAMPLE:

wind speed = C3
 sheet roof - 40 kg/m²
 roof load width = 3900 mm
 rafter/truss spacing = 600 mm
 lintel span = 3500 mm
 Enter span table at 4500 roof load width column, rafter/truss spacing 600 mm, and read down to a span equal to or greater than 3500 mm

ADOPT:

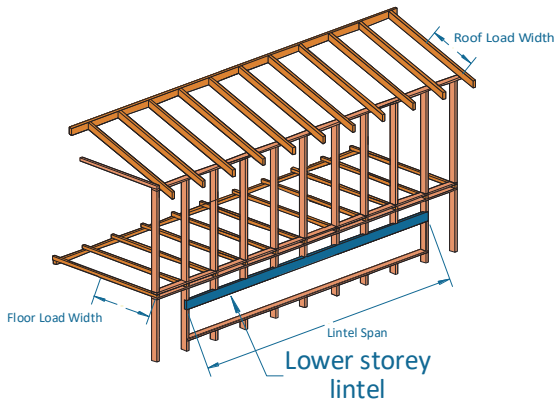
SmartLam GL 17C - 295 x 65 (requires additional 5 mm bearing length)

| Roof load width (mm) | | 1500 | | 3000 | | 4500 | | 6000 | | 7500 | |
|-----------------------------|-----------------------------------|--------------------------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Rafter/truss spacing (mm) | | 600 | 1200 | 600 | 1200 | 600 | 1200 | 600 | 1200 | 600 | 1200 |
| Member size (GL17C) Dx B | Roof mass (kg/m ²) | Maximum recommended Lintel span (mm) | | | | | | | | | |
| | | Single Span - Wind speed C1, C2 & C3 | | | | | | | | | |
| 130x65 | 40 | 2850 | 2800 | 2000 | 1750 | 1600 | 1200 | 1400 | NS | 1250 | NS |
| | 90 | 2750 | 2750 | 2000 | 1850 | 1600 | 1200 | 1400 | NS | 1250 | NS |
| 165x65 | 40 | 3700 | 3500 | 2600 | 2500 | 2050 | 1900 | 1750 | 1450 | 1550 | NS |
| | 90 | 3350 | 3300 | 2600 | 2550 | 2100 | 1950 | 1800 | 1500 ₅ | 1600 | 1000 |
| 195x65 | 40 | 4350 | 4300 | 3050 | 2950 | 2500 | 2400 | 2150 | 2000 | 1850 | 1550 ₁₀ |
| | 90 | 3850 | 3800 | 3100 | 2950 | 2550 | 2450 ₅ | 2200 ₅ | 2050 ₅ | 1900 | 1600 ₁₅ |
| 230x65 | 40 | 5150 | 5100 | 3650 | 3450 | 2900 | 2850 | 2550 ₅ | 2450 ₁₀ | 2250 ₅ | 2200 ₁₀ |
| | 90 | 4450 | 4400 | 3650 | 3500 | 2950 | 2850 ₅ | 2600 ₁₀ | 2500 ₁₅ | 2300 ₁₀ | 2200 ₁₅ |
| 260x65 | 40 | 5850 | 5750 | 4100 | 3950 | 3350 | 3200 | 2850 ₅ | 2800 ₁₅ | 2600 ₁₀ | 2500 ₂₀ |
| | 90 | 4950 | 4950 | 4050 | 4050 ₅ | 3400 ₁₀ | 3250 ₅ | 2900 ₁₀ | 2800 ₂₅ | 2600 ₂₀ | 2550 ₃₀ |
| 295x65 | 40 | 6650 | 6600 | 4700 | 4650 | 3800 ₅ | 3650 | 3250 ₅ | 3100 ₁₀ | 2900 ₁₅ | 2800 ₂₀ |
| | 90 | 5550 | 5500 | 4550 | 4500 | 3850 ₁₀ | 3700 ₁₀ | 3350 ₁₀ | 3150 ₂₀ | 2950 ₂₅ | 2850 ₄₀ |
| 330x65 | 40 | 7450 | 7400 | 5200 | 5200 ₅ | 4250 ₁₀ | 4150 ₁₅ | 3700 ₁₅ | 3500 ₁₀ | 3250 ₁₅ | 3100 ₂₅ |
| | 90 | 6150 | 6150 | 5000 ₅ | 5000 ₁₀ | 4300 ₁₅ | 4200 ₂₀ | 3750 ₂₅ | 3550 ₂₀ | 3350 ₂₀ | 3150 ₃₅ |
| 360x65 | 40 | 8150 | 8050 | 5700 | 5600 ₅ | 4650 ₅ | 4650 ₁₀ | 4000 ₁₅ | 3850 ₁₅ | 3600 ₃₀ | 3400 ₂₀ |
| | 90 | 6700 | 6700 | 5400 ₁₀ | 5400 ₁₀ | 4700 ₁₀ | 4700 ₁₅ | 4050 ₂₅ | 3950 ₂₅ | 3650 ₄₀ | 3450 ₃₀ |
| 395x65 | 40 | 8900 | 8850 | 6250 ₅ | 6200 ₅ | 5100 ₁₅ | 5050 ₂₀ | 4400 ₂₀ | 4350 ₃₀ | 3950 ₃₀ | 3800 ₂₅ |
| | 90 | 7350 | 7300 | 5950 ₅ | 5900 ₁₀ | 5150 ₂₅ | 5100 ₃₀ | 4450 ₃₀ | 4400 ₄₀ | 4000 ₄₀ | 3850 ₃₅ |
| 425x65 | 40 | 9650 | 9600 | 6750 ₁₀ | 6700 ₁₅ | 5500 ₂₀ | 5400 ₂₀ | 4750 ₂₀ | 4750 ₂₅ | 4250 ₄₀ | 4150 ₂₅ |
| | 90 | 7900 | 7900 | 6350 ₁₅ | 6350 ₁₅ | 5550 ₃₀ | 5500 ₃₅ | 4850 ₄₀ | 4850 ₅₀ | 4300 ₅₀ | 4200 ₃₅ |
| 460x65 | 40 | 10400 | 10350 | 7300 ₁₅ | 7300 ₁₅ | 5950 ₁₅ | 5850 ₂₅ | 5150 ₃₀ | 5100 ₄₀ | 4600 ₃₅ | 4550 ₄₅ |
| | 90 | 8600 | 8550 | 6850 ₁₅ | 6850 ₂₀ | 6050 ₃₅ | 5900 ₃₀ | 5200 ₄₀ | 5150 ₅₀ | 4650 ₄₅ | 4600 ₅₅ |
| 495x65 | 40 | 11200 | 11150 | 7850 ₁₅ | 7800 ₁₅ | 6400 ₂₅ | 6350 ₂₀ | 5550 ₄₀ | 5450 ₄₀ | 4950 ₅₀ | 4950 ₅₅ |
| | 90 | 9300 | 9300 ₅ | 7400 ₂₀ | 7350 ₂₅ | 6450 ₃₅ | 6400 ₃₀ | 5600 ₅₀ | 5550 ₆₀ | 5000 ₆₀ | 5000 ₇₀ |
| 130x85 | 40 | 3300 | 3150 | 2350 | 2200 | 1850 | 1550 | 1550 | 1150 | 1400 | NS |
| | 90 | 2950 | 2950 | 2350 | 2250 | 1850 | 1600 | 1600 | 1200 | 1450 | NS |
| 165x85 | 40 | 4200 | 4100 | 2950 | 2850 | 2400 | 2300 | 2050 | 1850 | 1800 | 1500 |
| | 90 | 3600 | 3550 | 2950 | 2900 | 2450 | 2350 | 2100 | 1950 | 1850 | 1550 |
| 195x85 | 40 | 5000 | 4950 | 3550 | 3350 | 2850 | 2750 | 2500 | 2350 | 2200 | 2100 |
| | 90 | 4150 | 4100 | 3400 | 3400 | 2900 | 2800 | 2500 | 2400 ₅ | 2250 | 2150 ₅ |
| 230x85 | 40 | 5950 | 5800 | 4150 | 4050 | 3400 | 3200 | 2900 | 2800 ₅ | 2600 | 2500 ₁₀ |
| | 90 | 4750 | 4750 | 3950 | 3900 | 3450 | 3250 | 2950 | 2850 ₁₀ | 2650 ₅ | 2550 ₁₅ |
| 260x85 | 40 | 6700 | 6650 | 4700 | 4650 | 3850 | 3650 | 3300 | 3150 | 2900 ₅ | 2850 ₁₀ |
| | 90 | 5300 | 5350 | 4350 | 4350 | 3900 | 3700 | 3350 | 3200 ₅ | 2950 ₁₀ | 2900 ₂₀ |
| 295x85 | 40 | 7600 | 7600 | 5350 | 5300 | 4350 | 4250 | 3750 ₅ | 3600 ₅ | 3350 | 3200 ₁₀ |
| | 90 | 6000 | 5950 | 4900 | 4850 | 4350 | 4350 ₅ | 3800 ₁₀ | 3650 ₁₀ | 3400 ₁₀ | 3250 ₁₅ |
| 330x85 | 40 | 8500 | 8450 | 6000 | 5900 | 4900 ₅ | 4850 ₁₀ | 4200 ₁₀ | 4100 ₁₅ | 3750 ₁₅ | 3600 ₁₀ |
| | 90 | 6650 | 6650 | 5400 | 5400 | 4800 ₁₀ | 4800 ₁₅ | 4250 ₁₅ | 4150 ₂₅ | 3800 ₂₀ | 3650 ₂₀ |
| 360x85 | 40 | 9250 | 9250 | 6550 | 6450 | 5300 ₅ | 5250 ₁₀ | 4600 ₅ | 4550 ₁₀ | 4100 ₁₅ | 4000 ₁₅ |
| | 90 | 7250 | 7250 | 5900 | 5850 | 5200 ₁₀ | 5200 ₁₅ | 4650 ₁₀ | 4650 ₂₀ | 4150 ₃₀ | 4050 ₂₀ |
| 395x85 | 40 | 10200 | 10200 | 7200 ₅ | 7200 ₅ | 5850 ₅ | 5750 ₁₀ | 5050 ₁₅ | 5050 ₂₀ | 4500 ₂₀ | 4450 ₂₅ |
| | 90 | 7950 | 7950 | 6400 | 6400 | 5650 ₁₀ | 5650 ₂₀ | 5100 ₂₅ | 5100 ₃₀ | 4600 ₂₅ | 4550 ₃₅ |
| 425x85 | 40 | 11050 | 11000 | 7750 ₅ | 7700 ₅ | 6300 ₁₀ | 6200 ₁₀ | 5450 ₂₀ | 5350 ₂₀ | 4900 ₃₀ | 4850 ₃₅ |
| | 90 | 8600 | 8600 | 6900 ₅ | 6900 ₁₀ | 6100 ₂₀ | 6050 ₁₅ | 5500 ₃₀ | 5450 ₄₀ | 4950 ₄₀ | 4900 ₄₅ |
| 460x85 | 40 | 11950 | 11950 | 8400 ₁₀ | 8300 ₅ | 6800 ₁₅ | 6800 ₂₀ | 5900 ₂₀ | 5800 ₂₅ | 5250 ₃₀ | 5200 ₃₅ |
| | 90 | 9350 | 9350 | 7500 ₁₀ | 7450 ₁₀ | 6550 ₂₀ | 6550 ₂₀ | 6000 ₃₅ | 5850 ₃₅ | 5300 ₄₀ | 5250 ₄₅ |
| 495x85 | 40 | 12000 | 12000 | 9000 ₁₀ | 9000 ₅ | 7350 ₂₀ | 7350 ₂₅ | 6350 ₂₅ | 6250 ₂₀ | 5650 ₃₅ | 5600 ₄₅ |
| | 90 | 10150 | 10150 | 8050 ₁₀ | 8050 ₁₅ | 7050 ₂₅ | 7050 ₃₀ | 6400 ₃₅ | 6350 ₃₀ | 5750 ₄₅ | 5650 ₅₅ |

NOTES:

1. D = member depth, B = member breadth, NS = not suitable.
2. Minimum bearing length = 35 mm at end supports. Subscript values indicate the minimum additional bearing length where required to be greater than 35 mm.
3. Restraint value for slenderness calculations is 600 mm.
4. Not all sizes of SmartLam GL17 in this table are stocked in each state. Please check with your supplier before ordering

Single span lintels in lower storey walls AS 4055 classification N1, N2, N3 & C1



EXAMPLE:

wind speed = N3
sheet roof - 40 kg/m²
roof load width = 3900 mm
floor load width = 1200 mm
rafter/truss spacing = 600 mm
lintel span = 3500 mm

Enter span table at 4500 roof load width column, floor load width 1200 mm, and read down to a span equal to or greater than 3500 mm

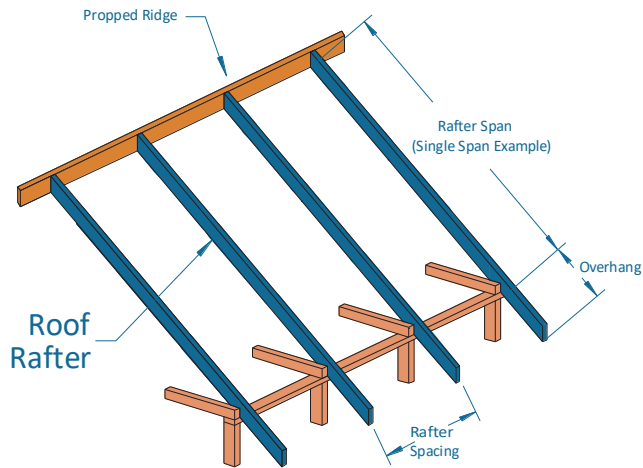
ADOPT: SmartLam GL 17C - 260 x 65

| Roof load width (mm) | | 1500 | | | 3000 | | | 4500 | | | 6000 | | |
|-------------------------------|--------------------------------|--|-------------------|--------------------|------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Floor load width (mm) | | 1200 | 2400 | 3600 | 1200 | 2400 | 3600 | 1200 | 2400 | 3600 | 1200 | 2400 | 3600 |
| Member size (GL17C) Dx B (mm) | Roof mass (kg/m ²) | Maximum recommended single span lintel span (mm) | | | | | | | | | | | |
| 130x65 | 40 | 2100 | 1850 | 1700 | 1950 | 1800 | 1650 | 1850 | 1700 | 1600 | 1800 | 1650 | 1550 |
| | 90 | 1950 | 1750 | 1650 | 1750 | 1650 | 1550 | 1600 | 1500 | 1450 | 1500 | 1450 | 1350 |
| 165x65 | 40 | 2700 | 2400 | 2200 | 2500 | 2300 | 2100 | 2400 | 2200 | 2050 | 2300 | 2100 | 2000 |
| | 90 | 2500 | 2250 | 2100 | 2250 | 2100 | 1950 | 2050 | 1950 | 1850 | 1950 | 1850 | 1750 |
| 195x65 | 40 | 3050 | 2800 | 2600 | 2950 | 2700 | 2500 | 2800 | 2600 | 2450 | 2700 | 2550 | 2350 |
| | 90 | 2900 | 2700 | 2500 | 2650 | 2500 | 2350 | 2450 | 2350 | 2200 | 2300 | 2200 | 2100 |
| 230x65 | 40 | 3550 | 3200 | 3000 | 3350 | 3100 | 2900 | 3200 | 3000 | 2850 | 3100 | 2950 | 2800 |
| | 90 | 3300 | 3100 | 2900 | 3050 | 2900 | 2750 | 2850 | 2750 | 2600 | 2750 | 2600 | 2500 |
| 260x65 | 40 | 3900 | 3550 | 3350 | 3700 | 3450 | 3250 | 3550 | 3350 | 3150 | 3450 | 3250 | 3100 |
| | 90 | 3700 | 3400 | 3200 | 3400 | 3200 | 3050 | 3200 | 3050 | 2900 | 3000 | 2900 | 2800 |
| 295x65 | 40 | 4350 | 4000 | 3700 | 4150 | 3850 | 3600 | 4000 | 3700 | 3500 | 3850 | 3600 | 3400 |
| | 90 | 4100 | 3800 | 3550 | 3750 | 3550 | 3400 | 3550 | 3350 | 3250 ₅ | 3350 | 3200 | 3100 ₅ |
| 330x65 | 40 | 4800 | 4400 | 4050 | 4600 | 4200 | 3950 ₅ | 4400 | 4100 | 3850 ₅ | 4200 | 3950 | 3750 ₅ |
| | 90 | 4550 | 4200 | 3950 ₅ | 4150 | 3900 | 3700 ₅ | 3900 | 3700 | 3550 ₁₀ | 3700 | 3550 ₅ | 3400 ₁₀ |
| 360x65 | 40 | 5200 | 4750 | 4400 ₅ | 4950 | 4550 | 4250 ₅ | 4750 | 4400 | 4150 ₅ | 4550 | 4300 | 4050 ₁₀ |
| | 90 | 4900 | 4500 | 4250 ₅ | 4500 | 4200 | 4000 ₁₀ | 4200 | 4000 ₅ | 3850 ₁₀ | 3950 ₅ | 3800 ₁₀ | 3700 ₁₅ |
| 395x65 | 40 | 5700 | 5150 | 4750 ₁₀ | 5400 | 4950 | 4650 ₁₀ | 5150 | 4800 | 4500 ₁₀ | 4950 | 4650 ₅ | 4400 ₁₀ |
| | 90 | 5300 | 4900 | 4600 ₁₀ | 4850 | 4600 ₅ | 4350 ₁₀ | 4550 ₅ | 4350 ₁₀ | 4150 ₁₅ | 4300 ₁₀ | 4150 ₁₀ | 4000 ₁₅ |
| 425x65 | 40 | 6100 | 5500 | 5100 ₁₀ | 5750 | 5300 ₅ | 4950 ₁₅ | 5500 | 5100 ₅ | 4800 ₁₅ | 5300 | 4950 ₅ | 4700 ₁₅ |
| | 90 | 5700 | 5250 ₅ | 4900 ₁₅ | 5200 | 4900 ₅ | 4650 ₁₅ | 4850 ₅ | 4600 ₁₀ | 4400 ₂₀ | 4600 ₁₀ | 4400 ₁₅ | 4250 ₂₀ |
| 460x65 | 40 | 6600 | 5950 ₅ | 5500 ₁₅ | 6200 | 5700 ₅ | 5300 ₁₅ | 5950 | 5500 ₅ | 5150 ₁₅ | 5700 | 5350 ₁₀ | 5050 ₂₀ |
| | 90 | 6150 | 5650 ₅ | 5300 ₁₅ | 5600 | 5250 ₁₀ | 5000 ₂₀ | 5200 ₁₀ | 4950 ₁₅ | 4750 ₂₀ | 4950 ₁₅ | 4750 ₂₀ | 4550 ₂₅ |
| 165x85 | 40 | 2900 | 2650 | 2400 | 2750 | 2500 | 2300 | 2650 | 2400 | 2250 | 2500 | 2350 | 2200 |
| | 90 | 2700 | 2500 | 2300 | 2450 | 2300 | 2150 | 2250 | 2150 | 2050 | 2150 | 2050 | 1950 |
| 195x85 | 40 | 3300 | 3050 | 2800 | 3150 | 2900 | 2750 | 3000 | 2850 | 2700 | 2900 | 2750 | 2600 |
| | 90 | 3100 | 2900 | 2750 | 2850 | 2700 | 2550 | 2700 | 2550 | 2400 | 2550 | 2400 | 2300 |
| 230x85 | 40 | 3800 | 3450 | 3250 | 3600 | 3350 | 3150 | 3450 | 3250 | 3050 | 3350 | 3150 | 3000 |
| | 90 | 3600 | 3300 | 3100 | 3300 | 3100 | 2950 | 3100 | 2950 | 2850 | 2950 | 2850 | 2750 |
| 260x85 | 40 | 4200 | 3850 | 3600 | 4000 | 3700 | 3500 | 3850 | 3600 | 3400 | 3700 | 3500 | 3300 |
| | 90 | 3950 | 3700 | 3450 | 3650 | 3450 | 3300 | 3400 | 3250 | 3150 | 3250 | 3150 | 3000 |
| 295x85 | 40 | 4700 | 4300 | 4000 | 4500 | 4150 | 3900 | 4300 | 4000 | 3800 | 4150 | 3900 | 3700 |
| | 90 | 4450 | 4100 | 3850 | 4050 | 3850 | 3650 | 3800 | 3650 | 3500 | 3600 | 3450 | 3350 |
| 330x85 | 40 | 5200 | 4750 | 4400 | 4950 | 4550 | 4250 | 4750 | 4400 | 4150 | 4550 | 4300 | 4050 |
| | 90 | 4900 | 4500 | 4250 | 4500 | 4200 | 4000 | 4200 | 4000 | 3850 | 4000 | 3800 | 3700 ₅ |
| 360x85 | 40 | 5650 | 5150 | 4750 | 5350 | 4950 | 4600 | 5100 | 4750 | 4500 | 4950 | 4600 | 4400 |
| | 90 | 5300 | 4900 | 4600 | 4850 | 4550 | 4350 | 4550 | 4300 | 4150 ₅ | 4300 | 4100 | 3950 ₅ |
| 395x85 | 40 | 6150 | 5600 | 5150 | 5850 | 5350 | 5000 | 5600 | 5200 | 4900 ₅ | 5350 | 5050 | 4750 ₅ |
| | 90 | 5800 | 5300 | 5000 ₅ | 5250 | 4950 | 4700 ₅ | 4900 | 4700 | 4500 ₅ | 4650 | 4450 ₅ | 4300 ₁₀ |
| 425x85 | 40 | 6650 | 6000 | 5550 ₅ | 6250 | 5750 | 5350 ₅ | 6000 | 5550 | 5200 ₅ | 5750 | 5400 | 5100 ₅ |
| | 90 | 6200 | 5700 | 5300 ₅ | 5650 | 5300 | 5000 ₅ | 5250 | 5000 ₅ | 4800 ₁₀ | 4950 ₅ | 4750 ₅ | 4600 ₁₀ |
| 460x85 | 40 | 7150 | 6450 | 5950 ₅ | 6800 | 6200 | 5750 ₁₀ | 6450 | 6000 | 5600 ₁₀ | 6200 | 5800 | 5450 ₁₀ |
| | 90 | 6700 | 6150 | 5750 ₁₀ | 6100 | 5700 | 5400 ₁₀ | 5650 | 5400 ₅ | 5150 ₁₅ | 5350 ₅ | 5100 ₁₀ | 4950 ₁₅ |
| 495x85 | 40 | 7750 | 6950 | 6400 ₁₀ | 7300 | 6650 | 6200 ₁₀ | 6950 | 6400 ₅ | 6000 ₁₀ | 6650 | 6200 ₅ | 5850 ₁₅ |
| | 90 | 7200 | 6600 | 6150 ₁₀ | 6550 | 6100 ₅ | 5800 ₁₅ | 6050 ₅ | 5750 ₁₀ | 5500 ₁₅ | 5750 ₁₀ | 5500 ₁₅ | 5250 ₂₀ |
| 525x85 | 40 | 8200 | 7400 ₅ | 6800 ₁₅ | 7750 | 7050 ₅ | 6550 ₁₅ | 7350 | 6800 ₅ | 6350 ₁₅ | 7050 | 6600 ₅ | 6200 ₁₅ |
| | 90 | 7650 | 7000 ₅ | 6500 ₁₅ | 6950 | 6500 ₅ | 6100 ₁₅ | 6450 ₅ | 6100 ₁₀ | 5800 ₂₀ | 6050 ₁₀ | 5800 ₁₅ | 5550 ₂₀ |

NOTES:

1. D = member depth, B = member breadth, NS = not suitable.
2. Total upper floor mass of 40 kg/m², floor live load of 1.5 kPa, floor point load of 1.8 kN.
3. Minimum bearing length = 35 mm at end supports. Subscript values indicate the minimum additional bearing length where required to be greater than 35 mm.
4. Restraint value for slenderness calculations is 600 mm.
5. Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering

Single/continuous span roof rafter with ceiling attached - AS 4055 classification N1, N2, N3 & N4



EXAMPLE:

wind speed = N3
 sheet roof - 40 kg/m²
 Rafter spacing = 600
 rafter span = 5800 mm

Enter span table at rafter spacing of 600 mm, and read down to a span equal to or greater than 5800 mm

ADOPT:

SmartLam GL 17C - 165 x 65

| Rafter spacing (mm) | | 450 | 600 | 900 | 1200 | 450 | 600 | 900 | 1200 |
|------------------------------|--------------------------------|--------------------------------------|-------|-------|-------|-----------------|-------|-------|-------|
| Member size (GL17C) DxB (mm) | Roof mass (kg/m ²) | Maximum recommended rafter span (mm) | | | | | | | |
| | | Single Span | | | | Continuous Span | | | |
| 130x65 | 30 | 5750 | 5300 | 4700 | 4300 | 6750 | 6400 | 5850 | 5300 |
| | 40 | 5300 | 4850 | 4300 | 3900 | 6400 | 6050 | 5400 | 4950 |
| | 75 | 4400 | 4000 | 3500 | 3200 | 5500 | 5050 | 4450 | 4050 |
| | 90 | 4150 | 3750 | 3300 | 3000 | 5200 | 4750 | 4200 | 3850 |
| 165x65 | 30 | 7000 | 6600 | 6000 | 5500 | 7950 | 7550 | 6950 | 6550 |
| | 40 | 6600 | 6150 | 5500 | 5000 | 7550 | 7150 | 6550 | 6150 |
| | 75 | 5600 | 5100 | 4500 | 4100 | 6650 | 6250 | 5600 | 5150 |
| | 90 | 5300 | 4850 | 4250 | 3850 | 6400 | 6000 | 5300 | 4850 |
| 195x65 | 30 | 8050 | 7550 | 6900 | 6450 | 8900 | 8450 | 7850 | 7400 |
| | 40 | 7550 | 7100 | 6450 | 6000 | 8450 | 8000 | 7400 | 6950 |
| | 75 | 6550 | 6100 | 5350 | 4850 | 7500 | 7050 | 6450 | 6050 |
| | 90 | 6250 | 5750 | 5050 | 4600 | 7200 | 6800 | 6200 | 5700 |
| 230x65 | 30 | 9250 | 8700 | 7950 | 7400 | 9900 | 9450 | 8800 | 8300 |
| | 40 | 8700 | 8150 | 7400 | 6900 | 9450 | 9000 | 8300 | 7800 |
| | 75 | 7500 | 7000 | 6300 | 5800 | 8400 | 7950 | 7250 | 6800 |
| | 90 | 7200 | 6650 | 6000 | 5450 | 8100 | 7650 | 6950 | 6550 |
| 260x65 | 30 | 10300 | 9700 | 8800 | 8200 | 10750 | 10250 | 9550 | 9050 |
| | 40 | 9700 | 9050 | 8200 | 7650 | 10250 | 9750 | 9050 | 8550 |
| | 75 | 8350 | 7750 | 7000 | 6500 | 9150 | 8650 | 7950 | 7450 |
| | 90 | 8000 | 7400 | 6650 | 6150 | 8850 | 8350 | 7600 | 7150 |
| 295x65 | 30 | 11500 | 10850 | 9900 | 9200 | 11650 | 11150 | 10400 | 9900 |
| | 40 | 10850 | 10150 | 9200 | 8550 | 11150 | 10650 | 9900 | 9350 |
| | 75 | 9350 | 8700 | 7800 | 7250 | 10000 | 9450 | 8700 | 8150 |
| | 90 | 8950 | 8300 | 7450 | 6900 | 9650 | 9100 | 8350 | 7850 |
| 330x65 | 30 | 12000 | 12000 | 10950 | 10200 | 12000 | 12000 | 11250 | 10700 |
| | 40 | 12000 | 11250 | 10200 | 9450 | 12000 | 11450 | 10700 | 10100 |
| | 75 | 10350 | 9650 | 8650 | 8000 | 10800 | 10250 | 9400 | 8850 |
| | 90 | 9900 | 9200 | 8200 | 7600 | 10450 | 9850 | 9050 | 8500 |
| 360x65 | 30 | 12000 | 12000 | 11900 | 11050 | 12000 | 12000 | 11900 | 11350 |
| | 40 | 12000 | 12000 | 11050 | 10250 | 12000 | 12000 | 11350 | 10750 |
| | 75 | 11250 | 10450 | 9350 | 8650 | 11450 | 10850 | 10000 | 9400 |
| | 90 | 10750 | 9950 | 8900 | 8200 | 11100 | 10500 | 9650 | 9050 |
| 395x65 | 30 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 40 | 12000 | 12000 | 12000 | 11200 | 12000 | 12000 | 12000 | 11450 |
| | 75 | 12000 | 11400 | 10200 | 9450 | 12000 | 11600 | 10700 | 10050 |
| | 90 | 11750 | 10850 | 9700 | 8950 | 11800 | 11200 | 10300 | 9650 |
| 425x65 | 30 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 40 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 75 | 12000 | 12000 | 10950 | 10100 | 12000 | 12000 | 11250 | 10600 |
| | 90 | 12000 | 11650 | 10400 | 9600 | 12000 | 11750 | 10850 | 10200 |
| 460x65 | 30 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 40 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 75 | 12000 | 12000 | 11850 | 10900 | 12000 | 12000 | 11900 | 11200 |
| | 90 | 12000 | 12000 | 11250 | 10350 | 12000 | 12000 | 11450 | 10800 |

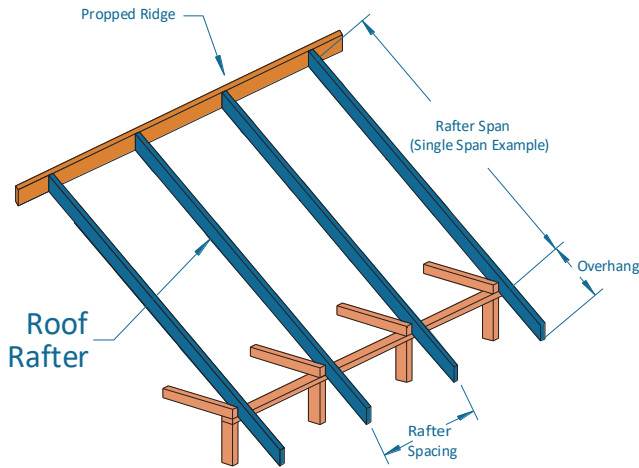
Single/continuous span roof rafter with ceiling attached - AS 4055 classification N1, N2, N3 & N4 (Cont'd)

| Rafter spacing (mm) | | 450 | 600 | 900 | 1200 | 450 | 600 | 900 | 1200 |
|---------------------------------|-----------------------------------|--------------------------------------|-------|-------|-------|-----------------|-------|-------|-------|
| Member size (GL17C) DxB (mm) | Roof mass (kg/m ²) | Maximum recommended rafter span (mm) | | | | | | | |
| | | Single Span | | | | Continuous Span | | | |
| 130x85 | 30 | 6150 | 5700 | 5100 | 4650 | 7100 | 6750 | 6250 | 5800 |
| | 40 | 5700 | 5250 | 4650 | 4250 | 6750 | 6400 | 5800 | 5350 |
| | 75 | 4750 | 4350 | 3800 | 3500 | 5950 | 5450 | 4850 | 4400 |
| | 90 | 4500 | 4100 | 3600 | 3250 | 5650 | 5150 | 4550 | 4200 |
| 165x85 | 30 | 7400 | 7000 | 6400 | 5950 | 8300 | 7900 | 7350 | 6950 |
| | 40 | 7000 | 6550 | 5950 | 5450 | 7900 | 7500 | 6950 | 6550 |
| | 75 | 6050 | 5600 | 4900 | 4450 | 7050 | 6650 | 6050 | 5600 |
| | 90 | 5750 | 5250 | 4600 | 4200 | 6800 | 6350 | 5750 | 5300 |
| 195x85 | 30 | 8500 | 8000 | 7350 | 6850 | 9250 | 8850 | 8250 | 7800 |
| | 40 | 8000 | 7550 | 6850 | 6400 | 8850 | 8450 | 7800 | 7350 |
| | 75 | 6950 | 6500 | 5850 | 5300 | 7900 | 7450 | 6850 | 6400 |
| | 90 | 6650 | 6200 | 5500 | 5000 | 7600 | 7200 | 6550 | 6150 |
| 230x85 | 30 | 9750 | 9200 | 8450 | 7900 | 10300 | 9900 | 9250 | 8750 |
| | 40 | 9200 | 8650 | 7900 | 7350 | 9900 | 9450 | 8750 | 8250 |
| | 75 | 8000 | 7500 | 6750 | 6250 | 8850 | 8400 | 7700 | 7250 |
| | 90 | 7650 | 7150 | 6450 | 5950 | 8550 | 8100 | 7400 | 6950 |
| 260x85 | 30 | 10800 | 10250 | 9400 | 8800 | 11150 | 10700 | 10050 | 9550 |
| | 40 | 10250 | 9650 | 8800 | 8200 | 10700 | 10250 | 9550 | 9000 |
| | 75 | 8900 | 8300 | 7500 | 6950 | 9650 | 9150 | 8400 | 7900 |
| | 90 | 8550 | 7950 | 7150 | 6650 | 9300 | 8800 | 8100 | 7600 |
| 295x85 | 30 | 12000 | 11450 | 10500 | 9850 | 12000 | 11600 | 10900 | 10400 |
| | 40 | 11450 | 10800 | 9850 | 9150 | 11600 | 11100 | 10400 | 9850 |
| | 75 | 10000 | 9300 | 8400 | 7750 | 10500 | 9950 | 9200 | 8650 |
| | 90 | 9550 | 8900 | 8000 | 7400 | 10150 | 9600 | 8850 | 8300 |
| 330x85 | 30 | 12000 | 12000 | 11650 | 10900 | 12000 | 12000 | 11750 | 11200 |
| | 40 | 12000 | 11950 | 10900 | 10150 | 12000 | 11950 | 11200 | 10650 |
| | 75 | 11050 | 10300 | 9300 | 8600 | 11350 | 10750 | 9950 | 9350 |
| | 90 | 10600 | 9850 | 8850 | 8200 | 11000 | 10400 | 9600 | 9000 |
| 360x85 | 30 | 12000 | 12000 | 12000 | 11850 | 12000 | 12000 | 12000 | 11900 |
| | 40 | 12000 | 12000 | 11850 | 11000 | 12000 | 12000 | 11900 | 11300 |
| | 75 | 12000 | 11200 | 10050 | 9300 | 12000 | 11450 | 10600 | 9950 |
| | 90 | 11500 | 10700 | 9600 | 8850 | 11650 | 11050 | 10200 | 9600 |
| 395x85 | 30 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 40 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 75 | 12000 | 12000 | 11000 | 10150 | 12000 | 12000 | 11300 | 10650 |
| | 90 | 12000 | 11700 | 10450 | 9650 | 12000 | 11750 | 10900 | 10250 |
| 425x85 | 30 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 40 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 75 | 12000 | 12000 | 11800 | 10900 | 12000 | 12000 | 11850 | 11200 |
| | 90 | 12000 | 12000 | 11250 | 10350 | 12000 | 12000 | 11450 | 10800 |
| 460x85 | 30 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 40 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 75 | 12000 | 12000 | 12000 | 11800 | 12000 | 12000 | 12000 | 11850 |
| | 90 | 12000 | 12000 | 12000 | 11200 | 12000 | 12000 | 12000 | 11400 |
| 495x85 | 30 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 40 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 75 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 90 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |

NOTES:

1. D = member depth, B = member breadth, NS = not suitable.
2. The above table was based on a batten spacing of 900 mm
3. Maximum birdsmouth depth = 30 % of rafter depth
4. End bearing lengths = 35 mm at end supports and 35 mm at internal supports for continuous members. Subscript values indicate the minimum additional bearing length where required to be greater than 35 mm at end supports and 35 mm at internal supports
5. Construction loads shall not be applied to overhangs until a 190 x 19 (minimum) timber fascia or other fascia of equivalent stiffness is rigidly and permanently attached to the end of rafter overhangs
6. rafter spacing up to 1200 mm
7. Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering

Single/continuous span roof rafter with ceiling attached - AS 4055 classification C1, C2 and C3



EXAMPLE:

wind speed = C3
 sheet roof - 40 kg/m²
 Rafter spacing = 600 mm
 rafter span = 5800 mm

Enter span table at rafter spacing of 600 mm, and read down to a span equal to or greater than 5800 mm

ADOPT:

SmartLam GL 17C - 165 x 65

| Rafter spacing (mm) | | 450 | 600 | 900 | 1200 | 450 | 600 | 900 | 1200 |
|-------------------------------|--------------------------------|--------------------------------------|-------|-------|-------|-----------------|-------|---------------------|---------------------|
| Member size (GL17C) Dx B (mm) | Roof mass (kg/m ²) | Maximum recommended rafter span (mm) | | | | | | | |
| | | Single Span | | | | Continuous Span | | | |
| 130x65 | 30 | 5500 | 5000 | 4000 | 3350 | 5900 | 5050 | 4000 | 3350 |
| | 40 | 5300 | 4850 | 4050 | 3400 | 5950 | 5100 | 4050 | 3400 |
| | 75 | 4400 | 4000 | 3500 | 3200 | 5500 | 5050 | 4150 | 3500 |
| 165x65 | 30 | 6950 | 6300 | 5150 | 4350 | 7500 | 6450 | 5150 | 4350 |
| | 40 | 6600 | 6150 | 5200 | 4400 | 7550 | 6500 | 5200 | 4400 |
| | 75 | 5600 | 5100 | 4500 | 4100 | 6650 | 6250 | 5350 | 4550 |
| 195x65 | 30 | 8050 | 7450 | 6150 | 5200 | 8900 | 7650 | 6150 | 5200 |
| | 40 | 7550 | 7100 | 6200 | 5250 | 8450 | 7750 | 6200 | 5250 |
| | 75 | 6550 | 6100 | 5350 | 4850 | 7500 | 7050 | 6350 | 5400 |
| 230x65 | 30 | 9250 | 8700 | 7300 | 6200 | 9900 | 9050 | 7300 | 6200 |
| | 40 | 8700 | 8150 | 7350 | 6250 | 9450 | 9000 | 7350 | 6250 |
| | 75 | 7500 | 7000 | 6300 | 5800 | 8400 | 7950 | 7250 | 6400 |
| 260x65 | 30 | 10300 | 9700 | 8250 | 7050 | 10750 | 10250 | 8250 | 7050 |
| | 40 | 9700 | 9050 | 8200 | 7100 | 10250 | 9750 | 8350 | 7100 |
| | 75 | 8350 | 7750 | 7000 | 6500 | 9150 | 8650 | 7950 | 7300 ₅ |
| 295x65 | 30 | 11500 | 10850 | 9400 | 8050 | 11650 | 11150 | 9400 | 8050 ₅ |
| | 40 | 10850 | 10150 | 9200 | 8100 | 11150 | 10650 | 9500 | 8100 ₅ |
| | 75 | 9350 | 8700 | 7800 | 7250 | 10000 | 9450 | 8700 | 8150 ₁₀ |
| 330x65 | 30 | 12000 | 12000 | 10550 | 9050 | 12000 | 12000 | 10550 ₅ | 9050 ₁₀ |
| | 40 | 12000 | 11250 | 10200 | 9150 | 12000 | 11450 | 10700 ₅ | 9150 ₁₀ |
| | 75 | 10350 | 9650 | 8650 | 8000 | 10800 | 10250 | 9400 ₅ | 8850 ₁₅ |
| 360x65 | 30 | 12000 | 12000 | 11550 | 9900 | 12000 | 12000 | 11550 ₁₀ | 9900 ₁₅ |
| | 40 | 12000 | 12000 | 11050 | 10000 | 12000 | 12000 | 11350 ₁₀ | 10000 ₂₀ |
| | 75 | 11250 | 10450 | 9350 | 8650 | 11450 | 10850 | 10000 ₅ | 9400 ₂₀ |
| 395x65 | 30 | 12000 | 12000 | 12000 | 10900 | 12000 | 12000 | 12000 ₁₀ | 10900 ₂₀ |
| | 40 | 12000 | 12000 | 12000 | 11000 | 12000 | 12000 | 12000 ₁₀ | 11000 ₂₅ |
| | 75 | 12000 | 11400 | 10200 | 9450 | 12000 | 11600 | 10700 ₁₀ | 10050 ₂₅ |
| 425x65 | 30 | 12000 | 12000 | 12000 | 11750 | 12000 | 12000 | 12000 ₁₀ | 11750 ₂₅ |
| | 40 | 12000 | 12000 | 12000 | 11850 | 12000 | 12000 | 12000 ₁₀ | 11850 ₃₀ |
| | 75 | 12000 | 12000 | 10950 | 10100 | 12000 | 12000 | 11250 ₁₅ | 10600 ₃₀ |
| 460x65 | 30 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₁₀ | 12000 ₃₀ |
| | 40 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₁₀ | 12000 ₃₀ |
| | 75 | 12000 | 12000 | 11850 | 10900 | 12000 | 12000 | 11900 ₂₀ | 11200 ₃₅ |
| | 90 | 12000 | 12000 | 11250 | 10350 | 12000 | 12000 | 11450 ₂₀ | 10800 ₃₅ |

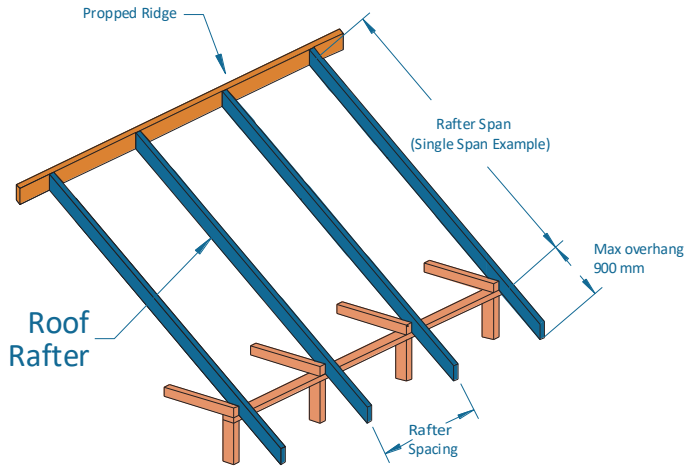
Single/continuous span roof rafter with ceiling attached - AS 4055 classification C1, C2 and C3 (Cont'd)

| Rafter spacing (mm) | | 450 | 600 | 900 | 1200 | 450 | 600 | 900 | 1200 |
|---------------------------------|-----------------------------------|--------------------------------------|-------|-------|-------|-----------------|-------|--------------------|---------------------|
| Member size (GL17C) DxB (mm) | Roof mass (kg/m ²) | Maximum recommended rafter span (mm) | | | | | | | |
| | | Single Span | | | | Continuous Span | | | |
| 130x85 | 30 | 6000 | 5450 | 4600 | 3900 | 6750 | 5800 | 4600 | 3900 |
| | 40 | 5700 | 5250 | 4650 | 3950 | 6750 | 5850 | 4650 | 3950 |
| | 75 | 4750 | 4350 | 3800 | 3500 | 5950 | 5450 | 4800 | 4050 |
| | 90 | 4500 | 4100 | 3600 | 3250 | 5650 | 5150 | 4550 | 3950 |
| 165x85 | 30 | 7400 | 6900 | 5950 | 5000 | 8300 | 7400 | 5950 | 5000 |
| | 40 | 7000 | 6550 | 5950 | 5100 | 7900 | 7500 | 6000 | 5100 |
| | 75 | 6050 | 5600 | 4900 | 4450 | 7050 | 6650 | 6050 | 5200 |
| | 90 | 5750 | 5250 | 4600 | 4200 | 6800 | 6350 | 5750 | 5100 |
| 195x85 | 30 | 8500 | 8000 | 7050 | 6000 | 9250 | 8800 | 7050 | 6000 |
| | 40 | 8000 | 7550 | 6850 | 6050 | 8850 | 8450 | 7150 | 6050 |
| | 75 | 6950 | 6500 | 5850 | 5300 | 7900 | 7450 | 6850 | 6200 |
| | 90 | 6650 | 6200 | 5500 | 5000 | 7600 | 7200 | 6550 | 6050 |
| 230x85 | 30 | 9750 | 9200 | 8400 | 7150 | 10300 | 9900 | 8400 | 7150 |
| | 40 | 9200 | 8650 | 7900 | 7200 | 9900 | 9450 | 8450 | 7200 |
| | 75 | 8000 | 7500 | 6750 | 6250 | 8850 | 8400 | 7700 | 7250 |
| | 90 | 7650 | 7150 | 6450 | 5950 | 8550 | 8100 | 7400 | 6950 |
| 260x85 | 30 | 10800 | 10250 | 9400 | 8100 | 11150 | 10700 | 9500 | 8100 |
| | 40 | 10250 | 9650 | 8800 | 8200 | 10700 | 10250 | 9550 | 8200 |
| | 75 | 8900 | 8300 | 7500 | 6950 | 9650 | 9150 | 8400 | 7900 |
| | 90 | 8550 | 7950 | 7150 | 6650 | 9300 | 8800 | 8100 | 7600 |
| 295x85 | 30 | 12000 | 11450 | 10500 | 9250 | 12000 | 11600 | 10850 | 9250 |
| | 40 | 11450 | 10800 | 9850 | 9150 | 11600 | 11100 | 10400 | 9350 |
| | 75 | 10000 | 9300 | 8400 | 7750 | 10500 | 9950 | 9200 | 8650 |
| | 90 | 9550 | 8900 | 8000 | 7400 | 10150 | 9600 | 8850 | 8300 |
| 330x85 | 30 | 12000 | 12000 | 11650 | 10400 | 12000 | 12000 | 11750 | 10400 ₅ |
| | 40 | 12000 | 11950 | 10900 | 10150 | 12000 | 11950 | 11200 | 10500 ₅ |
| | 75 | 11050 | 10300 | 9300 | 8600 | 11350 | 10750 | 9950 | 9350 ₅ |
| | 90 | 10600 | 9850 | 8850 | 8200 | 11000 | 10400 | 9600 | 9000 ₅ |
| 360x85 | 30 | 12000 | 12000 | 12000 | 11400 | 12000 | 12000 | 12000 | 11400 ₁₀ |
| | 40 | 12000 | 12000 | 11850 | 11000 | 12000 | 12000 | 11900 | 11300 ₁₀ |
| | 75 | 12000 | 11200 | 10050 | 9300 | 12000 | 11450 | 10600 | 9950 ₁₀ |
| | 90 | 11500 | 10700 | 9600 | 8850 | 11650 | 11050 | 10200 | 9600 ₁₀ |
| 395x85 | 30 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₁₀ |
| | 40 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₁₅ |
| | 75 | 12000 | 12000 | 11000 | 10150 | 12000 | 12000 | 11300 | 10650 ₁₀ |
| | 90 | 12000 | 11700 | 10450 | 9650 | 12000 | 11750 | 10900 | 10250 ₁₀ |
| 425x85 | 30 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₁₀ |
| | 40 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₁₅ |
| | 75 | 12000 | 12000 | 11800 | 10900 | 12000 | 12000 | 11850 ₅ | 11200 ₁₅ |
| | 90 | 12000 | 12000 | 11250 | 10350 | 12000 | 12000 | 11450 ₅ | 10800 ₁₅ |
| 460x85 | 30 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₁₀ |
| | 40 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₁₅ |
| | 75 | 12000 | 12000 | 12000 | 11800 | 12000 | 12000 | 12000 ₅ | 11850 ₂₀ |
| | 90 | 12000 | 12000 | 12000 | 11200 | 12000 | 12000 | 12000 ₅ | 11400 ₂₀ |
| 495x85 | 30 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₁₀ |
| | 40 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₁₅ |
| | 75 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₅ | 12000 ₂₀ |
| | 90 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₅ | 12000 ₂₅ |

NOTES:

- D = member depth, B = member breadth, NS = not suitable.
- The above table was based on a batten spacing of 900 mm
- Maximum birdsmouth depth = 30 % of rafter depth
- End bearing lengths = 35 mm at end supports and 35 mm at internal supports for continuous members. Subscript values indicate the minimum additional bearing length where required to be greater than 35 mm at end supports and 35 mm at internal supports
- Construction loads shall not be applied to overhangs until a 190 x 19 (minimum) timber fascia or other fascia of equivalent stiffness is rigidly and permanently attached to the end of rafter overhangs
- rafter spacing up to 1200 mm
- Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering

Single/continuous span rafter without ceiling attached AS 4055 classification N1, N2, N3 & N4



EXAMPLE:

wind speed = C3
sheet roof - 40 kg/m²
rafter/truss spacing = 600 mm
rafter span = 5800 mm

Enter span table at rafter spacing of 600 mm, and read down to a span equal to or greater than 5800 mm

ADOPT:

SmartLam GL 17C - 165 x 65

| Rafter spacing (mm) | | 450 | 600 | 900 | 1200 | 450 | 600 | 900 | 1200 |
|---------------------------------|-----------------------------------|--------------------------------------|-------|-------|-------|-----------------|-------|-------|-------|
| Member size (GL17C) DxB (mm) | Roof mass (kg/m ²) | Maximum recommended rafter span (mm) | | | | | | | |
| | | Single Span | | | | Continuous Span | | | |
| 130x65 | 10 | 5900 | 5650 | 4950 | 4500 | 6950 | 6950 | 5950 | 5050 |
| | 20 | 5900 | 5650 | 4950 | 4500 | 6950 | 6900 | 6100 | 5150 |
| | 40 | 5300 | 4850 | 4300 | 3900 | 6400 | 6050 | 5400 | 4950 |
| | 60 | 4700 | 4300 | 3750 | 3450 | 5850 | 5400 | 4750 | 4350 |
| 165x65 | 10 | 7900 | 7200 | 6300 | 5700 | 9300 | 9000 | 7600 | 6500 |
| | 20 | 7600 | 7200 | 6300 | 5700 | 8500 | 8100 | 7550 | 6650 |
| | 40 | 6600 | 6150 | 5500 | 5000 | 7550 | 7150 | 6550 | 6150 |
| | 60 | 6000 | 5500 | 4850 | 4400 | 6950 | 6550 | 6000 | 5500 |
| 195x65 | 10 | 9350 | 8500 | 7400 | 6750 | 10250 | 9950 | 9050 | 7700 |
| | 20 | 8700 | 8250 | 7400 | 6750 | 9450 | 9050 | 8450 | 7900 |
| | 40 | 7550 | 7100 | 6450 | 6000 | 8450 | 8000 | 7400 | 6950 |
| | 60 | 6900 | 6450 | 5750 | 5250 | 7850 | 7400 | 6800 | 6350 |
| 230x65 | 10 | 11050 | 10000 | 8750 | 7950 | 11300 | 11000 | 10500 | 9200 |
| | 20 | 9950 | 9450 | 8700 | 7950 | 10500 | 10100 | 9450 | 9000 |
| | 40 | 8700 | 8150 | 7400 | 6900 | 9450 | 9000 | 8300 | 7800 |
| | 60 | 7950 | 7400 | 6650 | 6200 | 8800 | 8300 | 7650 | 7150 |
| 260x65 | 10 | 12000 | 11350 | 9900 | 9000 | 12000 | 11850 | 11350 | 10450 |
| | 20 | 11100 | 10500 | 9700 | 9000 | 11350 | 10900 | 10250 | 9750 |
| | 40 | 9700 | 9050 | 8200 | 7650 | 10250 | 9750 | 9050 | 8550 |
| | 60 | 8800 | 8200 | 7400 | 6900 | 9550 | 9050 | 8350 | 7800 |
| 295x65 | 10 | 12000 | 12000 | 11250 | 10200 | 12000 | 12000 | 12000 | 11850 |
| | 20 | 12000 | 11750 | 10850 | 10150 | 12000 | 11850 | 11150 | 10650 |
| | 40 | 10850 | 10150 | 9200 | 8550 | 11150 | 10650 | 9900 | 9350 |
| | 60 | 9900 | 9200 | 8300 | 7700 | 10400 | 9900 | 9100 | 8550 |
| 330x65 | 10 | 12000 | 12000 | 12000 | 11400 | 12000 | 12000 | 12000 | 12000 |
| | 20 | 12000 | 12000 | 12000 | 11250 | 12000 | 12000 | 12000 | 11450 |
| | 40 | 12000 | 11250 | 10200 | 9450 | 12000 | 11450 | 10700 | 10100 |
| | 60 | 10950 | 10200 | 9200 | 8500 | 11250 | 10700 | 9850 | 9300 |
| 360x65 | 10 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 20 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 40 | 12000 | 12000 | 11050 | 10250 | 12000 | 12000 | 11350 | 10750 |
| | 60 | 11900 | 11050 | 9950 | 9200 | 11900 | 11350 | 10500 | 9900 |
| 395x65 | 10 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 20 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 40 | 12000 | 12000 | 12000 | 11200 | 12000 | 12000 | 12000 | 11450 |
| | 60 | 12000 | 12000 | 10850 | 10050 | 12000 | 12000 | 11200 | 10550 |
| 425x65 | 10 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 20 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 40 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 60 | 12000 | 12000 | 11650 | 10750 | 12000 | 12000 | 11750 | 11100 |
| 460x65 | 10 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 20 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 40 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 60 | 12000 | 12000 | 12000 | 11650 | 12000 | 12000 | 12000 | 11750 |

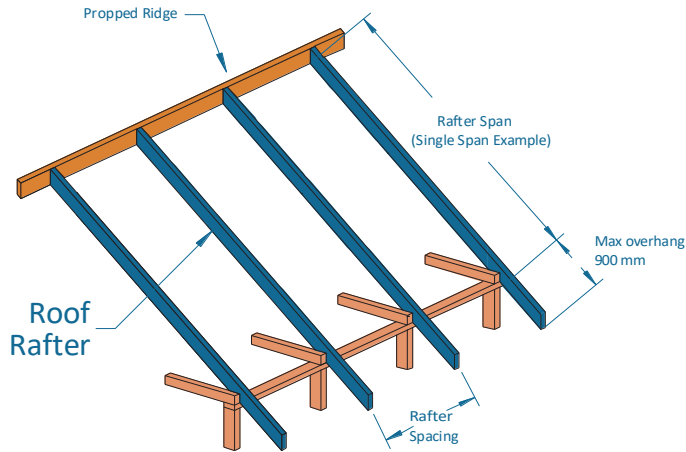
Single/continuous span roof rafter without ceiling attached AS 4055 classification N1, N2, N3 & N4 (Cont'd)

| Rafter spacing (mm) | | 450 | 600 | 900 | 1200 | 450 | 600 | 900 | 1200 |
|---------------------------------|-----------------------------------|--------------------------------------|-------|-------|-------|-----------------|-------|-------|-------|
| Member size (GL17C) DxB (mm) | Roof mass (kg/m ²) | Maximum recommended rafter span (mm) | | | | | | | |
| | | Single Span | | | | Continuous Span | | | |
| 130x85 | 10 | 6750 | 6200 | 5400 | 4900 | 7950 | 7950 | 6850 | 5800 |
| | 20 | 6600 | 6200 | 5400 | 4900 | 7550 | 7250 | 6750 | 5950 |
| | 40 | 5700 | 5250 | 4650 | 4250 | 6750 | 6400 | 5800 | 5350 |
| | 60 | 5100 | 4650 | 4100 | 3750 | 6250 | 5800 | 5150 | 4750 |
| 165x85 | 10 | 8650 | 7850 | 6850 | 6250 | 9550 | 9250 | 8800 | 7450 |
| | 20 | 7950 | 7550 | 6850 | 6250 | 8800 | 8450 | 7900 | 7500 |
| | 40 | 7000 | 6550 | 5950 | 5450 | 7900 | 7500 | 6950 | 6550 |
| | 60 | 6400 | 5950 | 5250 | 4800 | 7350 | 6950 | 6350 | 5950 |
| 195x85 | 10 | 10000 | 9300 | 8100 | 7350 | 10500 | 10250 | 9800 | 8900 |
| | 20 | 9100 | 8650 | 8000 | 7350 | 9800 | 9450 | 8850 | 8450 |
| | 40 | 8000 | 7550 | 6850 | 6400 | 8850 | 8450 | 7800 | 7350 |
| | 60 | 7350 | 6850 | 6200 | 5700 | 8250 | 7800 | 7200 | 6750 |
| 230x85 | 10 | 11400 | 10950 | 9550 | 8700 | 11550 | 11300 | 10850 | 10450 |
| | 20 | 10400 | 9950 | 9200 | 8650 | 10850 | 10450 | 9900 | 9450 |
| | 40 | 9200 | 8650 | 7900 | 7350 | 9900 | 9450 | 8750 | 8250 |
| | 60 | 8450 | 7900 | 7150 | 6650 | 9250 | 8750 | 8100 | 7600 |
| 260x85 | 10 | 12000 | 12000 | 10800 | 9850 | 12000 | 12000 | 11700 | 11300 |
| | 20 | 11550 | 11050 | 10250 | 9650 | 11700 | 11300 | 10700 | 10250 |
| | 40 | 10250 | 9650 | 8800 | 8200 | 10700 | 10250 | 9550 | 9000 |
| | 60 | 9400 | 8800 | 7950 | 7400 | 10050 | 9550 | 8800 | 8300 |
| 295x85 | 10 | 12000 | 12000 | 12000 | 11150 | 12000 | 12000 | 12000 | 12000 |
| | 20 | 12000 | 12000 | 11450 | 10800 | 12000 | 12000 | 11600 | 11100 |
| | 40 | 11450 | 10800 | 9850 | 9150 | 11600 | 11100 | 10400 | 9850 |
| | 60 | 10500 | 9850 | 8900 | 8250 | 10900 | 10400 | 9600 | 9050 |
| 330x85 | 10 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 20 | 12000 | 12000 | 12000 | 11950 | 12000 | 12000 | 12000 | 11950 |
| | 40 | 12000 | 11950 | 10900 | 10150 | 12000 | 11950 | 11200 | 10650 |
| | 60 | 11650 | 10900 | 9850 | 9150 | 11750 | 11200 | 10400 | 9800 |
| 360x85 | 10 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 20 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 40 | 12000 | 12000 | 11850 | 11000 | 12000 | 12000 | 11900 | 11300 |
| | 60 | 12000 | 11850 | 10700 | 9900 | 12000 | 11900 | 11050 | 10450 |
| 395x85 | 10 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 20 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 40 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 60 | 12000 | 12000 | 11700 | 10800 | 12000 | 12000 | 11750 | 11150 |
| 425x85 | 10 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 20 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 40 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 60 | 12000 | 12000 | 12000 | 11600 | 12000 | 12000 | 12000 | 11700 |
| 460x85 | 10 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 20 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 40 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 60 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| 495x85 | 10 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 20 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 40 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| | 60 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |

NOTES:

1. D = member depth, B = member breadth, NS = not suitable.
2. The above table was based on a batten spacing of 900 mm
3. Maximum birdsmouth depth = 30 % of rafter depth
4. End bearing lengths = 35 mm at end supports and 35 mm at internal supports for continuous members. Subscript values indicate the minimum additional bearing length where required to be greater than 35 mm at end supports and 35 mm at internal supports
5. Construction loads shall not be applied to overhangs until a 190 x 19 (minimum) timber fascia or other fascia of equivalent stiffness is rigidly and permanently attached to the end of rafter overhangs
6. rafter spacing up to 1200 mm
7. Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering

Single/continuous span rafter without ceiling attached AS 4055 classification C1, C2 and C3



EXAMPLE:

wind speed = C3
sheet roof - 40 kg/m²
rafter/truss spacing = 600 mm
rafter span = 5800 mm

Enter span table at rafter spacing of 600 mm, and read down to a span equal to or greater than 5800 mm

ADOPT:

SmartLam GL 17C - 165 x 65

| Rafter spacing (mm) | | 450 | 600 | 900 | 1200 | 450 | 600 | 900 | 1200 |
|---------------------------------|-----------------------------------|--------------------------------------|-------|-------|-------|-----------------|-------|---------------------|---------------------|
| Member size (GL17C) DxB (mm) | Roof mass (kg/m ²) | Maximum recommended rafter span (mm) | | | | | | | |
| | | Single Span | | | | Continuous Span | | | |
| 130x65 | 10 | 5500 | 4950 | 3900 | 3300 | 5750 | 4950 | 3900 | 3300 |
| | 20 | 5500 | 5000 | 3950 | 3300 | 5800 | 5000 | 3950 | 3300 |
| | 40 | 5300 | 4850 | 4050 | 3400 | 5950 | 5100 | 4050 | 3400 |
| | 60 | 4700 | 4300 | 3750 | 3450 | 5850 | 5200 | 4150 | 3450 |
| 165x65 | 10 | 6950 | 6300 | 5050 | 4250 | 7350 | 6300 | 5050 | 4250 |
| | 20 | 6950 | 6300 | 5100 | 4300 | 7450 | 6400 | 5100 | 4300 |
| | 40 | 6600 | 6150 | 5200 | 4400 | 7550 | 6500 | 5200 | 4400 |
| | 60 | 6000 | 5500 | 4850 | 4400 | 6950 | 6550 | 5300 | 4500 |
| 195x65 | 10 | 8200 | 7450 | 6000 | 5100 | 8750 | 7500 | 6000 | 5100 |
| | 20 | 8200 | 7450 | 6050 | 5150 | 8850 | 7550 | 6050 | 5150 |
| | 40 | 7550 | 7100 | 6200 | 5250 | 8450 | 7750 | 6200 | 5250 |
| | 60 | 6900 | 6450 | 5750 | 5250 | 7850 | 7400 | 6350 | 5350 |
| 230x65 | 10 | 9700 | 8800 | 7150 | 6050 | 10350 | 8900 | 7150 | 6050 |
| | 20 | 9700 | 8800 | 7200 | 6100 | 10450 | 8950 | 7200 | 6100 |
| | 40 | 8700 | 8150 | 7350 | 6250 | 9450 | 9000 | 7350 | 6250 |
| | 60 | 7950 | 7400 | 6650 | 6200 | 8800 | 8300 | 7500 | 6400 |
| 260x65 | 10 | 10950 | 9950 | 8100 | 6900 | 11750 | 10100 | 8100 | 6900 |
| | 20 | 10950 | 9950 | 8200 | 6950 | 11350 | 10200 | 8200 | 6950 |
| | 40 | 9700 | 9050 | 8200 | 7100 | 10250 | 9750 | 8350 | 7100 |
| | 60 | 8800 | 8200 | 7400 | 6900 | 9550 | 9050 | 8350 | 7300 ₅ |
| 295x65 | 10 | 12000 | 11300 | 9200 | 7850 | 12000 | 11500 | 9200 | 7850 |
| | 20 | 12000 | 11300 | 9300 | 7950 | 12000 | 11600 | 9300 | 7950 |
| | 40 | 10850 | 10150 | 9200 | 8100 | 11150 | 10650 | 9500 | 8100 ₅ |
| | 60 | 9900 | 9200 | 8300 | 7700 | 10400 | 9900 | 9100 | 8300 ₁₀ |
| 330x65 | 10 | 12000 | 12000 | 10350 | 8850 | 12000 | 12000 | 10350 | 8850 ₅ |
| | 20 | 12000 | 12000 | 10450 | 8950 | 12000 | 12000 | 10450 | 8950 ₅ |
| | 40 | 12000 | 11250 | 10200 | 9150 | 12000 | 11450 | 10700 ₅ | 9150 ₁₀ |
| | 60 | 10950 | 10200 | 9200 | 8500 | 11250 | 10700 | 9850 ₅ | 9300 ₁₅ |
| 360x65 | 10 | 12000 | 12000 | 11350 | 9700 | 12000 | 12000 | 11350 ₅ | 9700 ₁₀ |
| | 20 | 12000 | 12000 | 11450 | 9800 | 12000 | 12000 | 11450 ₅ | 9800 ₁₀ |
| | 40 | 12000 | 12000 | 11050 | 10000 | 12000 | 12000 | 11350 ₁₀ | 10000 ₂₀ |
| | 60 | 11900 | 11050 | 9950 | 9200 | 11900 | 11350 | 10500 ₁₀ | 9900 ₂₀ |
| 395x65 | 10 | 12000 | 12000 | 12000 | 10650 | 12000 | 12000 | 12000 ₅ | 10650 ₁₅ |
| | 20 | 12000 | 12000 | 12000 | 10750 | 12000 | 12000 | 12000 ₁₀ | 10750 ₂₀ |
| | 40 | 12000 | 12000 | 12000 | 11000 | 12000 | 12000 | 12000 ₁₀ | 11000 ₂₅ |
| | 60 | 12000 | 12000 | 10850 | 10050 | 12000 | 12000 | 11200 ₁₀ | 10550 ₂₅ |
| 425x65 | 10 | 12000 | 12000 | 12000 | 11500 | 12000 | 12000 | 12000 ₅ | 11500 ₂₀ |
| | 20 | 12000 | 12000 | 12000 | 11600 | 12000 | 12000 | 12000 ₁₀ | 11600 ₂₅ |
| | 40 | 12000 | 12000 | 12000 | 11850 | 12000 | 12000 | 12000 ₁₀ | 11850 ₃₀ |
| | 60 | 12000 | 12000 | 11650 | 10750 | 12000 | 12000 | 11750 ₁₅ | 11100 ₃₀ |
| 460x65 | 10 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₅ | 12000 ₂₅ |
| | 20 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₁₀ | 12000 ₂₅ |
| | 40 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₁₀ | 12000 ₃₀ |
| | 60 | 12000 | 12000 | 12000 | 11650 | 12000 | 12000 | 12000 ₁₅ | 11750 ₃₅ |

Single/continuous span roof rafter without ceiling attached AS 4055 classification C1, C2 and C3 (Cont'd)

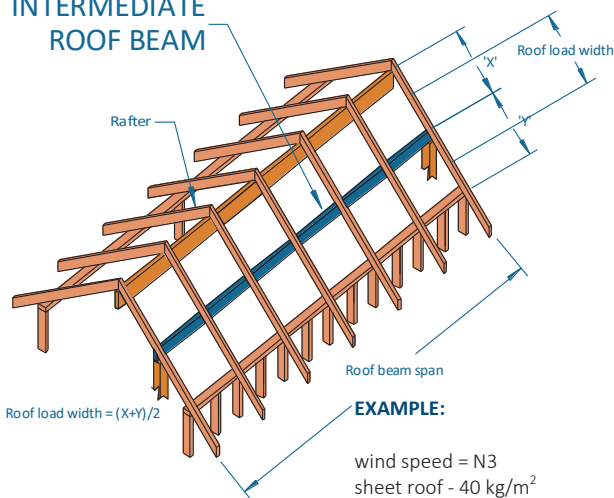
| Rafter spacing (mm) | | 450 | 600 | 900 | 1200 | 450 | 600 | 900 | 1200 |
|---------------------------------|-----------------------------------|--------------------------------------|-------|-------|-------|-----------------|-------|--------------------|---------------------|
| Member size (GL17C) DxB (mm) | Roof mass (kg/m ²) | Maximum recommended rafter span (mm) | | | | | | | |
| | | Single Span | | | | Continuous Span | | | |
| 130x85 | 10 | 6000 | 5450 | 4500 | 3800 | 6650 | 5650 | 4500 | 3800 |
| | 20 | 6000 | 5450 | 4550 | 3850 | 6700 | 5750 | 4550 | 3850 |
| | 40 | 5700 | 5250 | 4650 | 3950 | 6750 | 5850 | 4650 | 3950 |
| | 60 | 5100 | 4650 | 4100 | 3750 | 6250 | 5800 | 4750 | 4000 |
| 165x85 | 10 | 7600 | 6900 | 5800 | 4900 | 8450 | 7250 | 5800 | 4900 |
| | 20 | 7600 | 6900 | 5850 | 4950 | 8550 | 7350 | 5850 | 4950 |
| | 40 | 7000 | 6550 | 5950 | 5100 | 7900 | 7500 | 6000 | 5100 |
| | 60 | 6400 | 5950 | 5250 | 4800 | 7350 | 6950 | 6150 | 5200 |
| 195x85 | 10 | 9000 | 8150 | 6900 | 5850 | 10050 | 8600 | 6900 | 5850 |
| | 20 | 9000 | 8150 | 7000 | 5950 | 9800 | 8700 | 7000 | 5950 |
| | 40 | 8000 | 7550 | 6850 | 6050 | 8850 | 8450 | 7150 | 6050 |
| | 60 | 7350 | 6850 | 6200 | 5700 | 8250 | 7800 | 7200 | 6200 |
| 230x85 | 10 | 10600 | 9650 | 8200 | 7000 | 11550 | 10200 | 8200 | 7000 |
| | 20 | 10400 | 9650 | 8300 | 7050 | 10850 | 10350 | 8300 | 7050 |
| | 40 | 9200 | 8650 | 7900 | 7200 | 9900 | 9450 | 8450 | 7200 |
| | 60 | 8450 | 7900 | 7150 | 6650 | 9250 | 8750 | 8100 | 7400 |
| 260x85 | 10 | 12000 | 10900 | 9300 | 7950 | 12000 | 11600 | 9300 | 7950 |
| | 20 | 11550 | 10900 | 9400 | 8050 | 11700 | 11300 | 9400 | 8050 |
| | 40 | 10250 | 9650 | 8800 | 8200 | 10700 | 10250 | 9550 | 8200 |
| | 60 | 9400 | 8800 | 7950 | 7400 | 10050 | 9550 | 8800 | 8300 |
| 295x85 | 10 | 12000 | 12000 | 10600 | 9050 | 12000 | 12000 | 10600 | 9050 |
| | 20 | 12000 | 12000 | 10750 | 9150 | 12000 | 12000 | 10750 | 9150 |
| | 40 | 11450 | 10800 | 9850 | 9150 | 11600 | 11100 | 10400 | 9350 |
| | 60 | 10500 | 9850 | 8900 | 8250 | 10900 | 10400 | 9600 | 9050 |
| 330x85 | 10 | 12000 | 12000 | 11900 | 10200 | 12000 | 12000 | 11900 | 10200 |
| | 20 | 12000 | 12000 | 12000 | 10300 | 12000 | 12000 | 12000 | 10300 |
| | 40 | 12000 | 11950 | 10900 | 10150 | 12000 | 11950 | 11200 | 10500 ₅ |
| | 60 | 11650 | 10900 | 9850 | 9150 | 11750 | 11200 | 10400 | 9800 ₅ |
| 360x85 | 10 | 12000 | 12000 | 12000 | 11150 | 12000 | 12000 | 12000 | 11150 ₅ |
| | 20 | 12000 | 12000 | 12000 | 11250 | 12000 | 12000 | 12000 | 11250 ₅ |
| | 40 | 12000 | 12000 | 11850 | 11000 | 12000 | 12000 | 11900 | 11300 ₁₀ |
| | 60 | 12000 | 11850 | 10700 | 9900 | 12000 | 11900 | 11050 | 10450 ₁₀ |
| 395x85 | 10 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₅ |
| | 20 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₁₀ |
| | 40 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₁₅ |
| | 60 | 12000 | 12000 | 11700 | 10800 | 12000 | 12000 | 11750 | 11150 ₁₀ |
| 425x85 | 10 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₅ |
| | 20 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₁₀ |
| | 40 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₁₅ |
| | 60 | 12000 | 12000 | 12000 | 11600 | 12000 | 12000 | 12000 | 11700 ₁₅ |
| 460x85 | 10 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₁₀ |
| | 20 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₁₀ |
| | 40 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₁₅ |
| | 60 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₂₀ |
| 495x85 | 10 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₁₀ |
| | 20 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₁₀ |
| | 40 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₁₅ |
| | 60 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 ₅ | 12000 ₂₀ |

NOTES:

1. D = member depth, B = member breadth, NS = not suitable.
2. The above table was based on a batten spacing of 900 mm
3. Maximum birdsmouth depth = 30 % of rafter depth
4. End bearing lengths = 35 mm at end supports and 35 mm at internal supports for continuous members. Subscript values indicate the minimum additional bearing length where required to be greater than 35 mm at end supports and 35 mm at internal supports
5. Construction loads shall not be applied to overhangs until a 190x19 (minimum) timber fascia or other fascia of equivalent stiffness is rigidly and permanently attached to the end of rafter overhangs
6. rafter spacing up to 1200 mm
7. Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering

Ridge/Intermediate roof beam AS 4055 Classification N1, N2, N3 & N4

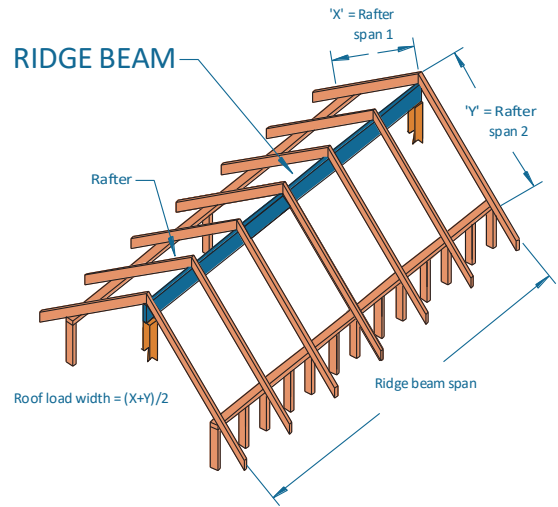
INTERMEDIATE ROOF BEAM



EXAMPLE:

wind speed = N3
sheet roof - 40 kg/m²
beam span = 4500 mm
X = 2000 mm Y = 3000 mm
roof load width = $(X+Y)/2 = 2500$ mm

RIDGE BEAM



Enter single span table at 3000 roof load width with column and read down to span equal to or greater than 4500 mm

ADOPT:

SmartLam GL 17C - 230 x 65 mm

| Roof load width (mm) | | 1800 | 3000 | 4200 | 5400 | 6600 | 7800 | 1800 | 3000 | 4200 | 5400 | 6600 | 7800 |
|------------------------------|--------------------------------|---|-------|--------------------|--------------------|--------------------|--------------------|-----------------|---------------------|--------------------|--------------------|--------------------|---------------------|
| Member size (GL17C) DxB (mm) | Roof mass (kg/m ²) | Maximum recommended Ridge/Intermediate beam span (mm) | | | | | | | | | | | |
| | | Single span | | | | | | Continuous span | | | | | |
| 130x65 | 40 | 3350 | 2750 | 2400 | 2150 | 2000 | 1850 | 4000 | 3050 | 2550 | 2250 | 2050 | 1850 |
| | 75 | 2750 | 2250 | 2000 | 1800 | 1700 | 1550 | 3500 | 2800 | 2350 | 2050 | 1850 | 1700 |
| 165x65 | 40 | 4250 | 3550 | 3100 | 2800 | 2550 | 2350 | 5250 | 3900 | 3250 | 2850 | 2550 | 2350 |
| | 75 | 3500 | 2900 | 2550 | 2350 | 2150 | 2000 | 4450 | 3550 | 2950 | 2600 | 2350 | 2150 |
| 195x65 | 40 | 5100 | 4200 | 3700 | 3350 | 3050 | 2800 | 6250 | 4600 | 3850 | 3400 | 3050 | 2800 |
| | 75 | 4200 | 3450 | 3050 | 2800 | 2550 | 2400 | 5250 | 4150 | 3500 | 3100 | 2750 | 2550 |
| 230x65 | 40 | 6050 | 5000 | 4400 | 3950 | 3600 | 3250 | 7000 | 5400 | 4550 | 4000 | 3600 | 3250 |
| | 75 | 5000 | 4150 | 3650 | 3300 | 3050 | 2850 | 6150 | 4900 | 4150 | 3600 | 3250 | 3000 |
| 260x65 | 40 | 6700 | 5700 | 5000 | 4500 | 4050 | 3700 | 7700 | 6100 | 5150 | 4500 | 4050 | 3700 ₅ |
| | 75 | 5650 | 4700 | 4150 | 3750 | 3450 | 3250 | 6700 | 5550 | 4650 | 4100 | 3700 ₅ | 3350 ₁₀ |
| 295x65 | 40 | 7500 | 6450 | 5750 | 5100 | 4600 | 4200 ₅ | 8400 | 7050 | 5800 | 5100 | 4600 ₅ | 4200 ₁₅ |
| | 75 | 6400 | 5400 | 4750 | 4300 | 3950 ₅ | 3700 ₅ | 7350 | 6300 | 5300 | 4650 ₅ | 4200 ₁₅ | 3850 ₂₀ |
| 330x65 | 40 | 8300 | 7100 | 6350 | 5700 | 5150 ₅ | 4700 ₁₀ | 9100 | 7950 | 6500 | 5700 ₅ | 5150 ₁₅ | 4700 ₂₅ |
| | 75 | 7050 | 6050 | 5350 | 4850 | 4500 ₅ | 4200 ₁₀ | 8000 | 7050 | 5900 ₅ | 5200 ₁₅ | 4700 ₂₅ | 4300 ₃₅ |
| 360x65 | 40 | 9000 | 7650 | 6900 | 6200 ₅ | 5600 ₁₀ | 5100 ₁₅ | 9700 | 8550 | 7100 ₅ | 6200 ₁₅ | 5600 ₂₅ | 5100 ₃₅ |
| | 75 | 7600 | 6550 | 5900 | 5350 ₅ | 4900 ₁₀ | 4600 ₁₅ | 8500 | 7500 | 6450 ₁₀ | 5650 ₂₀ | 5100 ₃₅ | 4650 ₄₅ |
| 395x65 | 40 | 9800 | 8350 | 7450 | 6800 ₁₀ | 6150 ₁₅ | 5600 ₂₀ | 10350 | 9150 | 7750 ₁₀ | 6800 ₂₀ | 6150 ₃₅ | 5600 ₄₅ |
| | 75 | 8300 | 7100 | 6400 ₅ | 5900 ₁₀ | 5450 ₁₅ | 5050 ₂₀ | 9100 | 8050 | 7050 ₂₀ | 6200 ₃₀ | 5600 ₄₅ | 5100 ₅₅ |
| 425x65 | 40 | 10500 | 8950 | 8000 ₅ | 7300 ₁₀ | 6600 ₁₅ | 6050 ₂₀ | 10900 | 9650 | 8350 ₁₅ | 7350 ₃₀ | 6600 ₄₀ | 6050 ₅₅ |
| | 75 | 8850 | 7600 | 6800 ₅ | 6300 ₁₅ | 5900 ₂₀ | 5500 ₂₅ | 9600 | 8450 ₅ | 7600 ₂₅ | 6700 ₄₀ | 6000 ₅₅ | 5500 ₇₅ |
| 460x65 | 40 | 11350 | 9650 | 8600 ₅ | 7850 ₁₅ | 7150 ₂₀ | 6500 ₂₅ | 11550 | 10200 ₅ | 9100 ₂₅ | 7950 ₄₀ | 7150 ₅₀ | 6500 ₇₀ |
| | 75 | 9550 | 8150 | 7300 ₁₀ | 6750 ₁₅ | 6300 ₂₅ | 5950 ₃₀ | 10150 | 9000 ₁₀ | 8200 ₃₅ | 7200 ₅₀ | 6500 ₇₀ | 5950 ₉₀ |
| 495x65 | 40 | 12000 | 10350 | 9200 ₁₀ | 8400 ₂₀ | 7650 ₂₅ | 7000 ₃₀ | 12000 | 10800 ₁₀ | 9900 ₃₅ | 8500 ₅₀ | 7650 ₆₅ | 7000 ₉₀ |
| | 75 | 10250 | 8700 | 7800 ₁₀ | 7200 ₂₀ | 6750 ₃₀ | 6400 ₃₅ | 10700 | 9500 ₁₅ | 8700 ₄₀ | 7750 ₆₀ | 7000 ₉₀ | 6400 ₁₀₅ |

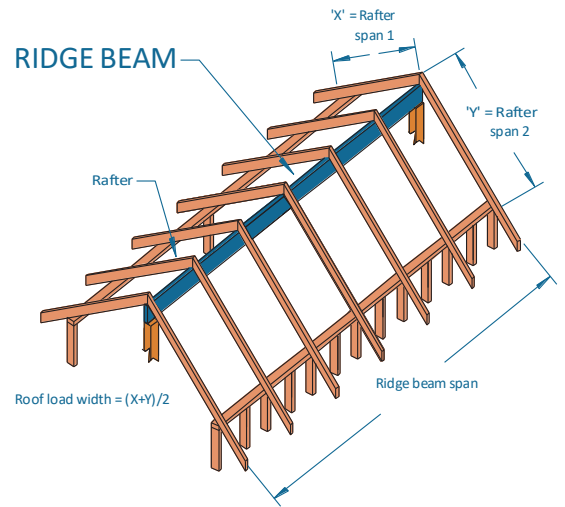
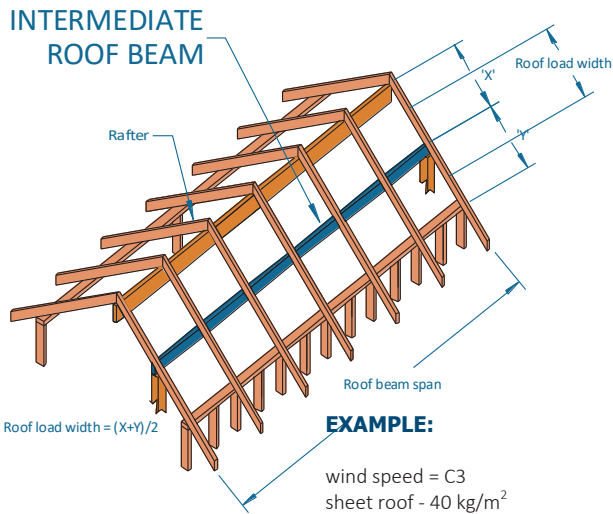
Ridge/Intermediate roof beam AS 4055 Classification N1, N2, N3 & N4 (Cont'd)

| Roof load width (mm) | | 1800 | 3000 | 4200 | 5400 | 6600 | 7800 | 1800 | 3000 | 4200 | 5400 | 6600 | 7800 |
|------------------------------------|-----------------------------------|---|-------|---------------------|---------------------|---------------------|--------------------|-----------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Member size (GL17C) DxB (mm) | Roof mass (kg/m ²) | Maximum recommended Ridge/Intermediate beam span (mm) | | | | | | | | | | | |
| | | Single span | | | | | | Continuous span | | | | | |
| 130x85 | 40 | 3650 | 3000 | 2650 | 2400 | 2200 | 2050 | 4600 | 3500 | 2950 | 2600 | 2300 | 2100 |
| | 75 | 3000 | 2500 | 2200 | 2000 | 1850 | 1700 | 3850 | 3200 | 2650 | 2350 | 2100 | 1950 |
| 165x85 | 40 | 4650 | 3850 | 3400 | 3050 | 2800 | 2600 | 5800 | 4450 | 3750 | 3250 | 2950 | 2700 |
| | 75 | 3850 | 3200 | 2800 | 2550 | 2350 | 2200 | 4850 | 4050 | 3400 | 3000 | 2700 | 2450 |
| 195x85 | 40 | 5550 | 4600 | 4050 | 3650 | 3350 | 3100 | 6600 | 5250 | 4400 | 3850 | 3450 | 3150 |
| | 75 | 4600 | 3800 | 3350 | 3050 | 2800 | 2650 | 5700 | 4750 | 4000 | 3500 | 3150 | 2900 |
| 230x85 | 40 | 6500 | 5500 | 4800 | 4350 | 4000 | 3700 | 7450 | 6200 | 5200 | 4550 | 4100 | 3750 |
| | 75 | 5450 | 4550 | 4000 | 3600 | 3350 | 3150 | 6500 | 5600 | 4700 | 4150 | 3750 | 3400 |
| 260x85 | 40 | 7200 | 6200 | 5500 | 4950 | 4550 | 4200 | 8150 | 7100 | 5850 | 5150 | 4600 | 4200 |
| | 75 | 6150 | 5150 | 4550 | 4150 | 3800 | 3550 | 7150 | 6300 | 5350 | 4700 | 4200 | 3850 |
| 295x85 | 40 | 8050 | 6900 | 6250 | 5650 | 5200 | 4800 | 8900 | 7850 | 6650 | 5800 | 5250 | 4800 |
| | 75 | 6900 | 5900 | 5200 | 4700 | 4350 | 4100 | 7800 | 6900 | 6050 | 5300 | 4800 ₅ | 4350 ₁₀ |
| 330x85 | 40 | 8900 | 7650 | 6850 | 6300 | 5850 | 5350 ₅ | 9650 | 8550 | 7400 | 6500 | 5850 ₅ | 5350 ₁₀ |
| | 75 | 7600 | 6550 | 5900 | 5350 | 4900 | 4600 ₅ | 8500 | 7500 | 6750 | 5950 ₅ | 5350 ₁₀ | 4900 ₂₀ |
| 360x85 | 40 | 9650 | 8250 | 7400 | 6800 | 6350 ₅ | 5850 ₅ | 10250 | 9100 | 8100 | 7100 ₅ | 6400 ₁₀ | 5850 ₂₀ |
| | 75 | 8200 | 7050 | 6350 | 5850 | 5400 ₅ | 5050 ₁₀ | 9050 | 8000 | 7350 | 6450 ₁₀ | 5800 ₂₀ | 5350 ₃₀ |
| 395x85 | 40 | 10550 | 9000 | 8050 | 7400 | 6900 ₅ | 6400 ₁₀ | 10950 | 9700 | 8900 | 7800 ₁₀ | 7000 ₂₀ | 6400 ₃₀ |
| | 75 | 8950 | 7650 | 6900 | 6400 ₅ | 6000 ₁₀ | 5600 ₁₅ | 9650 | 8550 | 7850 ₅ | 7100 ₂₀ | 6400 ₃₀ | 5850 ₄₀ |
| 425x85 | 40 | 11350 | 9650 | 8650 | 7900 ₅ | 7350 ₁₀ | 6900 ₁₅ | 11550 | 10250 | 9400 ₅ | 8350 ₁₅ | 7500 ₂₅ | 6900 ₃₅ |
| | 75 | 9600 | 8200 | 7350 | 6800 ₅ | 6350 ₁₀ | 6050 ₁₅ | 10200 | 9000 | 8300 ₁₀ | 7600 ₂₅ | 6850 ₃₅ | 6300 ₅₀ |
| 460x85 | 40 | 12000 | 10400 | 9300 | 8500 ₅ | 7900 ₁₀ | 7450 ₂₀ | 12000 | 10850 | 9950 ₁₀ | 9050 ₂₅ | 8150 ₃₅ | 7450 ₄₅ |
| | 75 | 10350 | 8800 | 7900 | 7300 ₁₀ | 6850 ₁₅ | 6450 ₂₀ | 10800 | 9550 | 8800 ₁₅ | 8200 ₃₅ | 7400 ₄₅ | 6800 ₆₀ |
| 495x85 | 40 | 12000 | 11200 | 9950 ₅ | 9100 ₁₀ | 8450 ₁₅ | 7950 ₂₀ | 12000 | 11450 | 10500 ₁₅ | 9700 ₃₀ | 8750 ₄₅ | 8000 ₅₅ |
| | 75 | 11100 | 9450 | 8450 ₅ | 7800 ₁₀ | 7300 ₁₅ | 6900 ₂₅ | 11350 | 10100 | 9250 ₂₀ | 8650 ₄₀ | 8000 ₅₅ | 7300 ₈₀ |
| 525x85 | 40 | 12000 | 11900 | 10550 ₅ | 9650 ₁₀ | 8950 ₂₀ | 8400 ₂₅ | 12000 | 11900 | 10950 ₂₀ | 10250 ₄₀ | 9300 ₅₀ | 8500 ₇₀ |
| | 75 | 11800 | 10000 | 8950 ₅ | 8250 ₁₅ | 7700 ₂₀ | 7250 ₂₅ | 11850 | 10500 | 9650 ₂₅ | 9050 ₄₅ | 8450 ₇₀ | 7750 ₉₀ |
| 560x85 | 40 | 12000 | 12000 | 11250 ₁₀ | 10250 ₁₅ | 9500 ₂₀ | 8900 ₃₀ | 12000 | 12000 | 11500 ₂₅ | 10750 ₄₅ | 9900 ₆₅ | 9050 ₈₅ |
| | 75 | 12000 | 10650 | 9500 ₁₀ | 8750 ₁₅ | 8150 ₂₅ | 7700 ₃₀ | 12000 | 11050 ₅ | 10150 ₃₀ | 9500 ₅₀ | 9000 ₈₅ | 8250 ₁₀₀ |
| 590x85 | 40 | 12000 | 12000 | 11900 ₁₀ | 10800 ₂₀ | 10000 ₂₅ | 9400 ₃₀ | 12000 | 12000 | 11900 ₂₅ | 11150 ₅₀ | 10400 ₈₀ | 9550 ₉₅ |
| | 75 | 12000 | 11250 | 10000 ₁₀ | 9200 ₂₀ | 8550 ₂₅ | 8100 ₃₅ | 12000 | 11450 ₁₀ | 10550 ₃₅ | 9850 ₅₅ | 9350 ₉₅ | 8700 ₁₁₀ |

NOTES:

1. D = member depth, B = member breadth, NS = not suitable.
2. End bearing lengths = 35 mm at end supports and 70 mm at internal supports for continuous members. Subscript values indicate the minimum additional bearing length where required to be greater than 35 mm at end supports and 70 mm at internal supports.
3. rafter spacing up to 1200 mm
4. Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering

Ridge/Intermediate roof beam AS 4055 Classification C1, C2 & C3



EXAMPLE:

wind speed = C3
 sheet roof - 40 kg/m²
 beam span = 4500 mm
 X = 2000 mm Y = 3000 mm
 roof load width = (X+Y)/2 = 2500 mm

Enter single span table at 3000 roof load width with column and read down to span equal to or greater than 4500 mm

ADOPT:

SmartLam GL 17C - 295 x 65 mm

| Roof load width (mm) | | 1800 | 3000 | 4200 | 5400 | 6600 | 7800 | 1800 | 3000 | 4200 | 5400 | 6600 | 7800 |
|-------------------------|--------------------------------|---|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|---------------------|---------------------|
| Member size (GL17C) DxB | Roof mass (kg/m ²) | Maximum recommended Ridge/Intermediate beam span (mm) | | | | | | | | | | | |
| | | Single span | | | | | | Continuous span | | | | | |
| 130x65 | 40 | 2700 | 2100 | 1750 | 1550 | 1400 | 1300 | 2700 | 2100 | 1750 | 1550 | 1400 | 1300 |
| | 75 | 2750 | 2100 | 1800 | 1550 | 1400 | 1300 | 2750 | 2100 | 1800 | 1550 | 1400 | 1300 |
| 165x65 | 40 | 3400 | 2650 | 2250 | 1950 | 1800 | 1650 | 3400 | 2650 | 2250 | 1950 | 1800 | 1650 |
| | 75 | 3500 | 2700 | 2250 | 2000 | 1800 | 1650 | 3500 | 2700 | 2250 | 2000 | 1800 | 1650 |
| 195x65 | 40 | 4100 | 3100 | 2650 | 2350 | 2100 | 1950 | 4100 | 3100 | 2650 | 2350 | 2100 | 1950 |
| | 75 | 4200 | 3200 | 2700 | 2350 | 2150 | 1950 | 4200 | 3200 | 2700 | 2350 | 2150 | 1950 ₁₀ |
| 230x65 | 40 | 4900 | 3700 | 3100 | 2750 | 2500 | 2300 ₅ | 4900 | 3700 | 3100 | 2750 | 2500 ₅ | 2300 ₁₅ |
| | 75 | 5000 | 3750 | 3150 | 2800 | 2500 ₅ | 2300 ₁₀ | 5000 | 3750 | 3150 | 2800 ₅ | 2500 ₁₅ | 2300 ₂₅ |
| 260x65 | 40 | 5600 | 4150 | 3500 | 3100 | 2800 ₅ | 2600 ₁₀ | 5600 | 4150 | 3500 | 3100 ₅ | 2800 ₁₅ | 2600 ₂₅ |
| | 75 | 5650 | 4250 | 3550 | 3150 ₅ | 2850 ₁₀ | 2600 ₁₅ | 5750 | 4250 | 3550 ₅ | 3150 ₁₅ | 2850 ₂₅ | 2600 ₃₅ |
| 295x65 | 40 | 6450 | 4700 | 4000 | 3550 ₅ | 3200 ₁₀ | 2950 ₁₅ | 6450 | 4700 | 4000 ₅ | 3550 ₂₀ | 3200 ₃₀ | 2950 ₄₀ |
| | 75 | 6400 | 4800 | 4050 ₅ | 3550 ₁₀ | 3200 ₁₅ | 2950 ₂₀ | 6550 | 4800 | 4050 ₁₅ | 3550 ₃₀ | 3200 ₄₀ | 2950 ₅₀ |
| 330x65 | 40 | 7250 | 5300 | 4450 ₅ | 3950 ₁₀ | 3600 ₁₅ | 3300 ₂₀ | 7250 | 5300 | 4450 ₁₅ | 3950 ₃₀ | 3600 ₄₀ | 3300 ₅₀ |
| | 75 | 7050 | 5350 ₅ | 4550 ₁₀ | 4000 ₁₅ | 3600 ₂₀ | 3300 ₂₅ | 7400 | 5350 ₁₀ | 4550 ₂₅ | 4000 ₄₀ | 3600 ₅₅ | 3300 ₇₅ |
| 360x65 | 40 | 7950 | 5750 | 4900 ₁₀ | 4300 ₁₅ | 3900 ₂₀ | 3600 ₂₅ | 7950 | 5750 ₁₀ | 4900 ₂₅ | 4300 ₄₀ | 3900 ₅₀ | 3600 ₇₀ |
| | 75 | 7600 | 5850 ₅ | 4950 ₁₅ | 4350 ₂₀ | 3900 ₂₅ | 3600 ₃₀ | 8100 ₅ | 5850 ₂₀ | 4950 ₃₅ | 4350 ₅₀ | 3900 ₇₅ | 3600 ₉₅ |
| 395x65 | 40 | 8800 | 6400 ₅ | 5350 ₁₅ | 4750 ₂₀ | 4300 ₂₅ | 3950 ₃₀ | 8800 | 6400 ₁₅ | 5350 ₃₅ | 4750 ₅₀ | 4300 ₇₀ | 3950 ₉₀ |
| | 75 | 8300 | 6500 ₁₀ | 5400 ₂₀ | 4750 ₂₅ | 4300 ₃₀ | 3950 ₄₀ | 8900 ₁₀ | 6500 ₃₀ | 5400 ₅₀ | 4750 ₇₀ | 4300 ₉₅ | 3950 ₁₁₀ |
| 425x65 | 40 | 9500 | 6950 ₁₀ | 5750 ₁₅ | 5100 ₂₅ | 4600 ₃₀ | 4250 ₃₅ | 9500 ₁₀ | 6950 ₂₅ | 5750 ₄₀ | 5100 ₆₀ | 4600 ₉₀ | 4250 ₁₀₅ |
| | 75 | 8850 ₅ | 7050 ₁₅ | 5850 ₂₅ | 5150 ₃₀ | 4650 ₃₅ | 4250 ₄₅ | 9600 ₂₀ | 7050 ₄₀ | 5850 ₆₀ | 5150 ₉₀ | 4650 ₁₀₅ | 4250 ₁₂₀ |
| 460x65 | 40 | 10300 ₅ | 7600 ₁₅ | 6250 ₂₀ | 5500 ₃₀ | 5000 ₃₅ | 4600 ₄₀ | 10300 ₁₅ | 7600 ₃₅ | 6250 ₅₅ | 5500 ₈₅ | 5000 ₁₀₀ | 4600 ₁₁₅ |
| | 75 | 9550 ₅ | 7700 ₂₀ | 6300 ₂₅ | 5550 ₃₅ | 5000 ₄₅ | 4600 ₅₀ | 10150 ₂₅ | 7700 ₅₀ | 6300 ₈₀ | 5550 ₁₀₀ | 5000 ₁₂₀ | 4600 ₁₄₀ |
| 495x65 | 40 | 11150 ₁₀ | 8200 ₁₅ | 6700 ₂₅ | 5950 ₃₅ | 5400 ₄₀ | 4950 ₄₅ | 11150 ₂₀ | 8200 ₄₅ | 6700 ₆₅ | 5950 ₉₅ | 5400 ₁₁₅ | 4950 ₁₃₀ |
| | 75 | 10250 ₁₀ | 8300 ₂₅ | 6800 ₃₀ | 5950 ₄₀ | 5400 ₅₀ | 4950 ₅₅ | 10700 ₃₀ | 8300 ₆₀ | 6800 ₉₅ | 5950 ₁₁₅ | 5400 ₁₃₅ | 4950 ₁₅₅ |

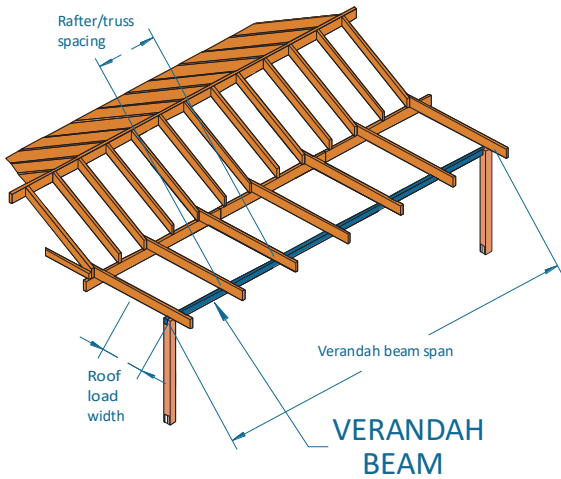
Single span Ridge/Intermediate roof beam AS 4055 Classification C1, C2 & C3 [Cont'd]

| Roof load width (mm) | | 1800 | 3000 | 4200 | 5400 | 6600 | 7800 | 1800 | 3000 | 4200 | 5400 | 6600 | 7800 |
|------------------------------------|-----------------------------------|---|---------------------|--------------------|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Member size (GL17C) DxB (mm) | Roof mass (kg/m ²) | Maximum recommended Ridge/Intermediate beam span (mm) | | | | | | | | | | | |
| | | Single span | | | | | | Continuous span | | | | | |
| 130x85 | 40 | 3050 | 2400 | 2000 | 1800 | 1600 | 1500 | 3050 | 2400 | 2000 | 1800 | 1600 | 1500 |
| | 75 | 3000 | 2450 | 2050 | 1800 | 1600 | 1500 | 3150 | 2450 | 2050 | 1800 | 1600 | 1500 |
| 165x85 | 40 | 3950 | 3000 | 2550 | 2250 | 2050 | 1900 | 3950 | 3000 | 2550 | 2250 | 2050 | 1900 |
| | 75 | 3850 | 3100 | 2600 | 2300 | 2050 | 1900 | 4050 | 3100 | 2600 | 2300 | 2050 | 1900 |
| 195x85 | 40 | 4750 | 3550 | 3000 | 2650 | 2400 | 2250 | 4750 | 3550 | 3000 | 2650 | 2400 | 2250 |
| | 75 | 4600 | 3650 | 3050 | 2700 | 2450 | 2250 | 4850 | 3650 | 3050 | 2700 | 2450 | 2250 |
| 230x85 | 40 | 5700 | 4200 | 3550 | 3150 | 2850 | 2650 | 5700 | 4200 | 3550 | 3150 | 2850 | 2650 |
| | 75 | 5450 | 4300 | 3600 | 3200 | 2850 | 2650 ₅ | 5800 | 4300 | 3600 | 3200 | 2850 ₅ | 2650 ₁₀ |
| 260x85 | 40 | 6500 | 4750 | 4050 | 3550 | 3250 | 3000 ₅ | 6500 | 4750 | 4050 | 3550 | 3250 ₅ | 3000 ₁₅ |
| | 75 | 6150 | 4850 | 4100 | 3600 | 3250 ₅ | 2950 ₁₀ | 6600 | 4850 | 4100 | 3600 ₅ | 3250 ₁₅ | 2950 ₂₀ |
| 295x85 | 40 | 7450 | 5400 | 4550 | 4050 | 3650 ₅ | 3400 ₁₀ | 7450 | 5400 | 4550 | 4050 ₅ | 3650 ₁₅ | 3400 ₂₅ |
| | 75 | 6900 | 5500 | 4650 | 4050 ₅ | 3700 ₁₀ | 3350 ₁₅ | 7550 | 5500 | 4650 ₅ | 4050 ₁₅ | 3700 ₂₅ | 3350 ₃₅ |
| 330x85 | 40 | 8400 | 6050 | 5100 | 4500 ₅ | 4100 ₁₀ | 3800 ₁₅ | 8400 | 6050 | 5100 ₅ | 4500 ₁₅ | 4100 ₂₅ | 3800 ₃₅ |
| | 75 | 7600 | 6150 | 5200 ₅ | 4550 ₁₀ | 4100 ₁₅ | 3750 ₂₀ | 8500 | 6150 | 5200 ₁₅ | 4550 ₂₅ | 4100 ₄₀ | 3750 ₅₀ |
| 360x85 | 40 | 9200 | 6700 | 5600 ₅ | 4950 ₁₀ | 4450 ₁₅ | 4100 ₂₀ | 9200 | 6700 | 5600 ₁₀ | 4950 ₂₅ | 4450 ₃₅ | 4100 ₄₅ |
| | 75 | 8200 | 6800 ₅ | 5650 ₁₀ | 4950 ₁₅ | 4500 ₂₀ | 4100 ₂₅ | 9050 | 6800 ₁₀ | 5650 ₂₀ | 4950 ₃₅ | 4500 ₅₀ | 4100 ₆₀ |
| 395x85 | 40 | 10150 | 7450 | 6150 ₁₀ | 5400 ₁₅ | 4900 ₂₀ | 4500 ₂₅ | 10150 | 7450 ₁₀ | 6150 ₂₀ | 5400 ₃₅ | 4900 ₄₅ | 4500 ₆₀ |
| | 75 | 8950 | 7500 ₅ | 6200 ₁₀ | 5450 ₂₀ | 4900 ₂₅ | 4500 ₃₀ | 9650 | 7500 ₂₀ | 6200 ₃₀ | 5450 ₄₅ | 4900 ₆₅ | 4500 ₈₅ |
| 425x85 | 40 | 10950 | 8050 ₅ | 6600 ₁₀ | 5850 ₁₅ | 5300 ₂₀ | 4850 ₂₅ | 10950 | 8050 ₁₅ | 6600 ₃₀ | 5850 ₄₅ | 5300 ₅₅ | 4850 ₈₀ |
| | 75 | 9600 | 8150 ₁₀ | 6650 ₁₅ | 5850 ₂₀ | 5300 ₃₀ | 4850 ₃₅ | 10200 | 8150 ₂₅ | 6650 ₄₀ | 5850 ₅₅ | 5300 ₈₅ | 4850 ₁₀₀ |
| 460x85 | 40 | 11900 | 8800 ₁₀ | 7150 ₁₅ | 6300 ₂₀ | 5700 ₂₅ | 5250 ₃₀ | 11900 ₅ | 8800 ₂₅ | 7150 ₃₅ | 6300 ₅₅ | 5700 ₈₀ | 5250 ₉₅ |
| | 75 | 10350 | 8800 ₁₅ | 7200 ₂₀ | 6350 ₂₅ | 5700 ₃₅ | 5250 ₄₀ | 10800 ₅ | 8900 ₃₅ | 7200 ₅₀ | 6350 ₈₀ | 5700 ₉₅ | 5250 ₁₁₀ |
| 495x85 | 40 | 12000 | 9550 ₁₀ | 7700 ₂₀ | 6800 ₂₅ | 6150 ₃₀ | 5650 ₃₅ | 12000 ₅ | 9550 ₃₀ | 7700 ₄₅ | 6800 ₇₀ | 6150 ₉₀ | 5650 ₁₀₅ |
| | 75 | 11100 | 9450 ₁₅ | 7750 ₂₅ | 6800 ₃₀ | 6150 ₄₀ | 5650 ₄₅ | 11350 ₁₀ | 9600 ₄₅ | 7750 ₆₅ | 6800 ₉₀ | 6150 ₁₁₀ | 5650 ₁₂₅ |
| 525x85 | 40 | 12000 | 10150 ₁₅ | 8150 ₂₀ | 7200 ₃₀ | 6550 ₃₅ | 6000 ₄₀ | 12000 ₅ | 10150 ₄₀ | 8150 ₅₅ | 7200 ₈₅ | 6550 ₁₀₀ | 6000 ₁₂₀ |
| | 75 | 11800 ₅ | 10000 ₂₀ | 8200 ₂₅ | 7250 ₃₅ | 6500 ₄₅ | 6000 ₅₀ | 11850 ₁₅ | 10250 ₅₅ | 8200 ₈₀ | 7250 ₁₀₀ | 6500 ₁₂₀ | 6000 ₁₄₀ |
| 560x85 | 40 | 12000 | 10900 ₂₀ | 8750 ₂₅ | 7700 ₃₅ | 6950 ₄₀ | 6400 ₄₅ | 12000 ₅ | 10900 ₄₅ | 8750 ₇₀ | 7700 ₉₅ | 6950 ₁₁₅ | 6400 ₁₃₀ |
| | 75 | 12000 ₅ | 10650 ₂₅ | 8800 ₃₀ | 7700 ₄₀ | 6950 ₅₀ | 6400 ₅₅ | 12000 ₁₅ | 10950 ₆₅ | 8800 ₉₅ | 7700 ₁₁₅ | 6950 ₁₃₅ | 6400 ₁₅₀ |
| 590x85 | 40 | 12000 | 11550 ₂₀ | 9300 ₃₀ | 8100 ₃₅ | 7350 ₄₅ | 6750 ₅₀ | 12000 ₅ | 11550 ₅₅ | 9300 ₈₅ | 8100 ₁₀₅ | 7350 ₁₂₅ | 6750 ₁₄₀ |
| | 75 | 12000 ₅ | 11250 ₂₅ | 9350 ₃₅ | 8100 ₄₅ | 7350 ₅₀ | 6700 ₆₀ | 12000 ₁₅ | 11450 ₈₀ | 9350 ₁₀₅ | 8100 ₁₂₅ | 7350 ₁₄₅ | 6700 ₁₆₅ |

NOTES:

1. D = member depth, B = member breadth, NS = not suitable.
2. End bearing lengths = 35 mm at end supports and 70 mm at internal supports for continuous members. Subscript values indicate the minimum additional bearing length where required to be greater than 35 mm at end supports and 70 mm at internal supports.
3. rafter spacing up to 1200 mm
4. Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering

Single span Verandah beam AS 4055 Classification N1, N2, N3 & N4



EXAMPLE:

wind speed = N3
 sheet roof - 40 kg/m²
 roof load width = 3900 mm
 rafter/truss spacing = 600 mm
 verandah span = 3500 mm

Enter span table at 4500 roof load width column, rafter spacing of 600 mm, and read down to a span equal to or greater than 3500 mm

ADOPT:

SmartLam GL 17C - 195 x 65

| Roof load width (mm) | | 1500 | | 3000 | | 4500 | | 6000 | | 7500 | |
|------------------------------|--------------------------------|--|-------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Rafter/truss spacing (mm) | | 600 | 1200 | 600 | 1200 | 600 | 1200 | 600 | 1200 | 600 | 1200 |
| Member size (GL17C) DxB (mm) | Roof mass (kg/m ²) | Maximum recommended verandah span (mm) | | | | | | | | | |
| | | Single span | | | | | | | | | |
| 130x65 | 40 | 2700 | 2800 | 1900 | 1900 | 1500 | 1300 | 1300 | NS | 1100 | NS |
| | 75 | 2400 | 2400 | 1700 | 1600 | 1400 | 1200 | 1100 | NS | NS | NS |
| 165x65 | 40 | 3500 | 3500 | 2400 | 2500 | 1900 | 1900 | 1600 | 1500 | 1400 ₅ | NS |
| | 75 | 3100 | 3100 | 2200 | 2200 | 1800 | 1700 | 1500 | 1300 | 1300 ₅ | NS |
| 195x65 | 40 | 4200 | 4200 | 2900 | 2900 | 2300 | 2300 | 1900 | 1900 | 1700 | 1500 ₂₀ |
| | 75 | 3700 | 3600 | 2600 | 2700 | 2100 | 2100 | 1800 | 1800 ₅ | 1600 ₁₀ | 1000 ₅ |
| 230x65 | 40 | 4800 | 4800 | 3500 | 3500 | 2800 | 2800 ₅ | 2300 | 2300 ₅ | 2000 ₅ | 1800 ₁₀ |
| | 75 | 4300 | 4300 | 3200 | 3100 | 2500 | 2600 ₅ | 2200 ₁₀ | 2100 ₁₀ | 1900 ₁₀ | 1600 ₃₀ |
| 260x65 | 40 | 5400 | 5400 | 4000 | 4000 | 3200 | 3100 | 2600 ₅ | 2700 ₁₅ | 2300 ₁₅ | 2200 ₂₀ |
| | 75 | 4800 | 4800 | 3600 | 3600 | 2900 | 2900 ₅ | 2500 ₁₅ | 2400 ₂₀ | 2200 ₃₀ | 1800 ₂₅ |
| 295x65 | 40 | 6100 | 6000 | 4500 | 4400 | 3600 ₅ | 3600 ₅ | 3000 ₁₀ | 3000 ₂₀ | 2600 ₂₅ | 2600 ₃₅ |
| | 75 | 5400 | 5400 | 4100 | 4100 | 3300 | 3300 ₅ | 2800 ₂₀ | 2800 ₃₀ | 2500 ₃₅ | 2400 ₄₅ |
| 330x65 | 40 | 6700 | 6700 | 4900 | 4900 | 4100 ₁₀ | 4100 ₁₅ | 3500 ₂₀ | 3400 ₁₅ | 3000 ₃₀ | 3000 ₄₀ |
| | 75 | 6000 | 5900 | 4500 | 4500 | 3800 ₁₀ | 3700 ₅ | 3200 ₁₅ | 3200 ₂₅ | 2800 ₃₅ | 2800 ₄₅ |
| 360x65 | 40 | 7300 | 7300 | 5300 | 5300 ₅ | 4400 ₁₀ | 4400 ₁₅ | 3800 ₂₅ | 3700 ₂₀ | 3300 ₂₅ | 3200 ₃₅ |
| | 75 | 6500 | 6500 | 4900 | 4900 ₅ | 4100 ₁₀ | 4100 ₁₀ | 3500 ₃₀ | 3500 ₂₀ | 3100 ₄₀ | 3000 ₅₅ |
| 395x65 | 40 | 8000 | 8000 | 5800 | 5800 | 4800 ₁₅ | 4700 ₂₀ | 4100 ₂₅ | 4100 ₂₀ | 3600 ₄₅ | 3600 ₃₅ |
| | 75 | 7100 | 7100 | 5300 | 5300 ₅ | 4400 ₁₀ | 4400 ₂₀ | 3900 ₃₀ | 3900 ₂₅ | 3400 ₃₅ | 3400 ₅₀ |
| 425x65 | 40 | 8700 | 8700 | 6200 ₅ | 6200 | 5100 ₁₅ | 5100 ₂₀ | 4400 ₃₀ | 4400 ₄₀ | 3900 ₄₅ | 3900 ₄₀ |
| | 75 | 7600 | 7600 | 5700 ₅ | 5700 ₅ | 4800 ₂₀ | 4700 ₁₅ | 4200 ₃₀ | 4200 ₃₀ | 3700 ₆₀ | 3600 ₄₅ |
| 460x65 | 40 | 9400 | 9400 | 6700 ₅ | 6700 ₁₀ | 5500 ₂₀ | 5500 ₃₀ | 4700 ₄₀ | 4700 ₃₅ | 4200 ₄₅ | 4200 ₄₀ |
| | 75 | 8300 | 8300 | 6100 ₁₀ | 6100 ₅ | 5100 ₂₀ | 5100 ₃₀ | 4500 ₄₀ | 4400 ₅₀ | 4000 ₆₀ | 4000 ₅₀ |
| 495x65 | 40 | 10200 | 10200 | 7300 ₁₀ | 7200 ₁₅ | 5900 ₂₀ | 5800 ₂₅ | 5000 ₄₀ | 5000 ₄₅ | 4500 ₅₅ | 4500 ₆₅ |
| | 75 | 8900 | 8900 | 6600 ₁₀ | 6600 ₅ | 5500 ₂₀ | 5400 ₃₀ | 4800 ₅₀ | 4700 ₆₀ | 4300 ₆₀ | 4300 ₅₅ |

Single span Verandah beam AS 4055 Classification N1, N2, N3 & N4 [Cont'd]

| Roof load width (mm) | | 1500 | | 3000 | | 4500 | | 6000 | | 7500 | |
|------------------------------------|-----------------------------------|--|-------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Rafter/truss spacing (mm) | | 600 | 1200 | 600 | 1200 | 600 | 1200 | 600 | 1200 | 600 | 1200 |
| Member size (GL17C) DxB (mm) | Roof mass (kg/m ²) | Maximum recommended verandah span (mm) | | | | | | | | | |
| | | Single span | | | | | | | | | |
| 130x85 | 40 | 3000 | 3000 | 2100 | 2100 | 1600 | 1600 | 1400 | 1200 | 1200 | NS |
| | 75 | 2600 | 2700 | 1900 | 1900 | 1500 | 1400 | 1300 | 1100 | 1100 | NS |
| 165x85 | 40 | 3900 | 3900 | 2700 | 2700 | 2100 | 2100 | 1800 | 1800 | 1500 | 1400 ₅ |
| | 75 | 3400 | 3300 | 2400 | 2500 | 1900 | 1900 | 1600 | 1600 | 1500 | 1100 |
| 195x85 | 40 | 4500 | 4500 | 3200 | 3200 | 2500 | 2600 | 2100 | 2100 | 1800 | 1800 |
| | 75 | 4000 | 4000 | 2900 | 2900 | 2300 | 2300 | 2000 | 1900 | 1700 | 1600 ₁₀ |
| 230x85 | 40 | 5200 | 5200 | 3900 | 3800 | 3000 | 3000 | 2500 | 2600 ₅ | 2200 ₅ | 2200 ₅ |
| | 75 | 4600 | 4600 | 3500 | 3400 | 2800 | 2800 | 2400 | 2300 ₁₀ | 2100 | 2000 ₁₀ |
| 260x85 | 40 | 5800 | 5800 | 4300 | 4300 | 3500 | 3400 | 2900 | 2900 ₅ | 2500 ₁₀ | 2500 ₂₀ |
| | 75 | 5200 | 5200 | 4000 | 3900 | 3200 | 3200 | 2700 | 2700 ₁₅ | 2400 ₁₅ | 2300 ₂₅ |
| 295x85 | 40 | 6500 | 6500 | 4800 | 4800 | 4000 | 4000 | 3400 | 3300 ₅ | 2900 ₁₅ | 2900 ₂₅ |
| | 75 | 5800 | 5800 | 4400 | 4400 | 3700 | 3600 | 3100 ₅ | 3100 ₁₀ | 2700 ₁₅ | 2800 ₂₅ |
| 330x85 | 40 | 7300 | 7300 | 5300 | 5300 | 4400 | 4400 | 3800 ₁₀ | 3700 ₁₀ | 3300 ₁₀ | 3200 ₂₀ |
| | 75 | 6500 | 6500 | 4900 | 4900 | 4100 ₅ | 4100 ₁₀ | 3500 ₁₅ | 3500 ₁₀ | 3100 ₂₀ | 3100 ₃₅ |
| 360x85 | 40 | 7900 | 7900 | 5800 | 5800 | 4800 ₅ | 4700 | 4100 ₁₀ | 4100 ₁₀ | 3600 ₂₅ | 3600 ₂₀ |
| | 75 | 7000 | 7000 | 5300 | 5300 | 4400 | 4400 ₅ | 3900 ₁₅ | 3800 ₁₅ | 3400 ₂₀ | 3300 ₃₀ |
| 395x85 | 40 | 8700 | 8700 | 6300 | 6300 | 5200 ₅ | 5200 ₁₀ | 4500 ₁₅ | 4400 ₂₀ | 4000 ₂₅ | 4000 ₂₅ |
| | 75 | 7700 | 7700 | 5800 | 5700 | 4800 ₁₀ | 4800 ₁₅ | 4200 ₂₅ | 4200 ₃₀ | 3800 ₃₅ | 3700 ₃₀ |
| 425x85 | 40 | 9400 | 9400 | 6800 | 6800 | 5500 ₁₀ | 5500 ₁₅ | 4800 ₂₀ | 4700 ₃₀ | 4200 ₃₅ | 4200 ₄₅ |
| | 75 | 8300 | 8300 | 6200 | 6200 | 5100 ₁₀ | 5100 ₁₅ | 4500 ₂₀ | 4500 ₃₀ | 4000 ₄₀ | 4000 ₃₅ |
| 460x85 | 40 | 10300 | 10200 | 7300 | 7300 ₅ | 6000 ₁₅ | 5900 ₁₀ | 5100 ₂₀ | 5100 ₃₀ | 4600 ₃₀ | 4500 ₄₀ |
| | 75 | 9000 | 9000 | 6700 | 6700 ₅ | 5500 ₁₅ | 5500 ₂₀ | 4800 ₃₀ | 4800 ₃₅ | 4300 ₄₅ | 4300 ₆₀ |
| 495x85 | 40 | 11100 | 11100 | 7900 | 7900 ₅ | 6400 ₁₅ | 6400 ₁₀ | 5500 ₂₀ | 5500 ₃₀ | 4900 ₄₅ | 4800 ₅₀ |
| | 75 | 9800 | 9700 | 7200 ₅ | 7200 ₅ | 5900 ₂₀ | 5900 ₁₅ | 5200 ₃₀ | 5100 ₃₅ | 4600 ₄₅ | 4600 ₅₅ |
| 525x85 | 40 | 11900 | 11800 | 8400 ₅ | 8400 ₅ | 6800 ₂₀ | 6800 ₂₅ | 5800 ₃₀ | 5800 ₃₅ | 5100 ₄₅ | 5100 ₅₀ |
| | 75 | 10400 | 10400 | 7600 ₅ | 7600 ₅ | 6300 ₂₀ | 6200 ₁₅ | 5400 ₃₀ | 5400 ₃₅ | 4900 ₆₀ | 4800 ₇₀ |
| 560x85 | 40 | 12000 | 12000 | 9000 ₅ | 9000 ₅ | 7200 ₂₀ | 7200 ₂₅ | 6200 ₃₅ | 6100 ₃₀ | 5400 ₄₅ | 5400 ₅₅ |
| | 75 | 11200 | 11100 | 8100 ₁₀ | 8100 ₁₀ | 6700 ₂₀ | 6700 ₁₅ | 5800 ₄₀ | 5800 ₄₅ | 5200 ₆₀ | 5200 ₇₀ |
| 590x85 | 40 | 12000 | 12000 | 9500 ₁₀ | 9500 ₁₀ | 7600 ₂₅ | 7600 ₂₅ | 6500 ₃₅ | 6500 ₃₀ | 5700 ₅₅ | 5700 ₆₅ |
| | 75 | 11900 | 11800 | 8600 ₁₀ | 8600 ₁₀ | 7000 ₂₅ | 7000 ₃₀ | 6100 ₄₅ | 6100 ₄₅ | 5400 ₆₀ | 5400 ₇₀ |

NOTES:

1. D = member depth, B = member breadth, NS = not suitable.
2. End bearing lengths = 35 mm at end supports and 70 mm at internal supports for continuous members. Subscript values indicate the minimum additional bearing length where required to be greater than 35 mm at end supports and 70 mm at internal supports.
3. Restraint value for slenderness calculations is 1200 mm
4. Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering

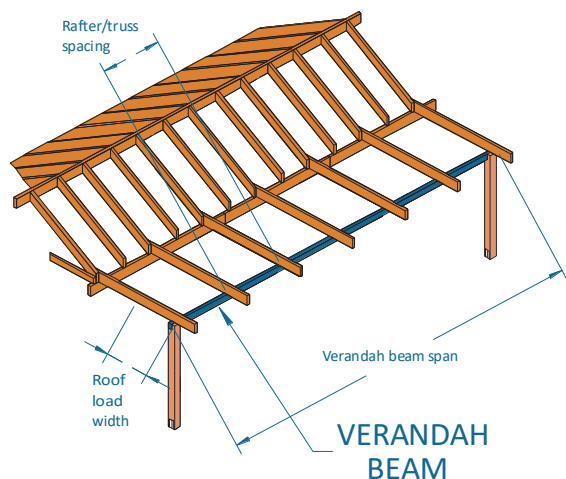
Continuous span Verandah beam AS 4055 Classification N1, N2, N3 & N4

| Roof load width (mm) | | 1500 | | 3000 | | 4500 | | 6000 | | 7500 | |
|------------------------------------|-----------------------------------|--|-------|--------------------|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|---------------------|
| Rafter/truss spacing (mm) | | 600 | 1200 | 600 | 1200 | 600 | 1200 | 600 | 1200 | 600 | 1200 |
| Member size (GL17C) DxB (mm) | Roof mass (kg/m ²) | Maximum recommended verandah span (mm) | | | | | | | | | |
| | | Continuous span | | | | | | | | | |
| 130x65 | 40 | 3400 | 3400 | 2300 | 2300 | 1800 | 1700 | 1500 | 1200 | 1300 | NS |
| | 75 | 3000 | 3000 | 2200 | 2100 | 1700 | 1500 | 1400 | NS | NS | NS |
| 165x65 | 40 | 4300 | 4300 | 3000 | 2900 | 2300 | 2200 | 1900 | 1600 | 1500 | 1000 |
| | 75 | 3800 | 3800 | 2800 | 2800 | 2200 | 2100 | 1600 | 1400 | 1400 | NS |
| 195x65 | 40 | 4800 | 4800 | 3500 | 3400 | 2700 | 2700 | 2200 | 2100 | 1700 | 1400 ₅ |
| | 75 | 4400 | 4400 | 3300 | 3200 | 2600 | 2600 | 2100 | 1600 ₅ | 1500 ₅ | 1000 |
| 230x65 | 40 | 5500 | 5500 | 4100 | 4100 | 3200 | 3200 | 2700 ₁₀ | 2700 ₁₀ | 2100 ₂₀ | 1800 ₁₀ |
| | 75 | 5000 | 5000 | 3900 | 3900 | 3000 | 3000 | 2400 ₁₅ | 2500 ₁₅ | 1700 ₁₅ | 1400 ₁₅ |
| 260x65 | 40 | 6000 | 6000 | 4700 | 4600 | 3600 ₅ | 3600 ₅ | 3000 ₂₀ | 3000 ₂₀ | 2500 ₃₅ | 2600 ₄₀ |
| | 75 | 5400 | 5400 | 4300 | 4300 | 3500 ₁₀ | 3400 ₅ | 2800 ₂₅ | 2800 ₃₀ | 2000 ₃₀ | 1600 ₁₀ |
| 295x65 | 40 | 6500 | 6500 | 5100 | 5100 | 4100 ₁₅ | 4100 ₁₅ | 3400 ₃₀ | 3400 ₂₅ | 2800 ₅₀ | 2900 ₅₅ |
| | 75 | 6000 | 6000 | 4800 | 4700 | 3900 ₂₀ | 3900 ₂₀ | 3200 ₄₀ | 3200 ₄₀ | 2600 ₇₅ | 2600 ₆₀ |
| 330x65 | 40 | 7000 | 7100 | 5600 | 5600 | 4600 ₂₅ | 4600 ₂₅ | 3800 ₄₅ | 3800 ₄₅ | 3200 ₈₀ | 3100 ₇₀ |
| | 75 | 6500 | 6500 | 5200 | 5200 | 4400 ₃₀ | 4400 ₃₀ | 3600 ₅₅ | 3300 ₅₀ | 2700 ₈₅ | 2800 ₉₀ |
| 360x65 | 40 | 7400 | 7600 | 5900 ₅ | 6000 ₅ | 5000 ₃₅ | 5000 ₃₅ | 4200 ₆₀ | 4200 ₆₀ | 3400 ₉₅ | 3200 ₈₀ |
| | 75 | 6800 | 6900 | 5500 ₅ | 5500 ₅ | 4800 ₄₀ | 4700 ₄₀ | 3900 ₇₅ | 3500 ₅₅ | 3200 ₁₁₀ | 3000 ₁₀₀ |
| 395x65 | 40 | 7800 | 8100 | 6400 ₁₀ | 6400 ₁₀ | 5400 ₄₅ | 5400 ₄₀ | 4600 ₈₅ | 4600 ₈₅ | 3900 ₁₁₀ | 3400 ₉₀ |
| | 75 | 7200 | 7400 | 5900 ₁₀ | 5900 ₁₀ | 5100 ₅₀ | 5100 ₅₀ | 4300 ₉₅ | 4300 ₉₅ | 3400 ₁₂₀ | 3100 ₁₀₅ |
| 425x65 | 40 | 8100 | 8600 | 6700 ₁₅ | 6700 ₁₅ | 5700 ₅₀ | 5700 ₅₀ | 4900 ₉₅ | 4900 ₉₅ | 4200 ₁₂₅ | 3600 ₁₀₅ |
| | 75 | 7500 | 7800 | 6200 ₂₀ | 6200 ₂₀ | 5400 ₅₅ | 5400 ₅₅ | 4600 ₁₀₅ | 4600 ₁₀₅ | 3600 ₁₃₅ | 3600 ₁₃₅ |
| 460x65 | 40 | 8500 | 9000 | 7000 ₁₅ | 7100 ₂₀ | 6100 ₆₀ | 6100 ₆₀ | 5300 ₁₁₀ | 5300 ₁₁₀ | 4500 ₁₄₀ | 4300 ₁₃₅ |
| | 75 | 7900 | 8300 | 6600 ₂₀ | 6600 ₂₀ | 5700 ₇₀ | 5700 ₇₀ | 5000 ₁₂₀ | 4900 ₁₂₀ | 3900 ₁₄₅ | 3700 ₁₄₀ |
| 495x65 | 40 | 8900 | 9500 | 7300 ₂₀ | 7500 ₂₅ | 6400 ₇₅ | 6400 ₇₀ | 5700 ₁₂₀ | 5700 ₁₂₀ | 4900 ₁₆₀ | 4800 ₁₅₅ |
| | 75 | 8200 | 8700 | 6900 ₂₅ | 7000 ₃₀ | 6000 ₈₅ | 6000 ₈₅ | 5300 ₁₃₅ | 5300 ₁₃₅ | 4300 ₁₆₅ | 3800 ₁₄₅ |
| 130x85 | 40 | 3800 | 3800 | 2700 | 2600 | 2100 | 2000 | 1700 | 1500 | 1400 | NS |
| | 75 | 3300 | 3200 | 2400 | 2400 | 1900 | 1900 | 1500 | 1500 | 1300 | NS |
| 165x85 | 40 | 4500 | 4500 | 3400 | 3300 | 2600 | 2700 | 2200 | 2100 | 1700 | 1600 |
| | 75 | 4100 | 4100 | 3100 | 3000 | 2500 | 2500 | 2000 | 1900 | 1600 | 1300 |
| 195x85 | 40 | 5100 | 5200 | 4000 | 4000 | 3100 | 3100 | 2600 | 2600 | 2200 | 1700 |
| | 75 | 4700 | 4700 | 3600 | 3600 | 2900 | 2900 | 2400 | 2400 ₅ | 1700 | 1600 |
| 230x85 | 40 | 5800 | 5800 | 4500 | 4500 | 3700 | 3600 | 3000 | 3000 | 2600 ₁₀ | 2600 ₁₅ |
| | 75 | 5300 | 5300 | 4200 | 4200 | 3500 | 3400 | 2800 ₅ | 2800 ₅ | 2300 ₁₅ | 1800 |
| 260x85 | 40 | 6300 | 6300 | 5000 | 5000 | 4200 | 4200 | 3500 ₁₀ | 3400 ₁₀ | 2900 ₂₀ | 2900 ₂₅ |
| | 75 | 5800 | 5800 | 4600 | 4600 | 4000 | 3900 | 3200 ₁₅ | 3100 ₁₅ | 2500 ₃₀ | 2700 ₃₅ |
| 295x85 | 40 | 6900 | 6900 | 5500 | 5500 | 4600 | 4600 | 3900 ₂₀ | 3900 ₂₀ | 3300 ₃₅ | 3200 ₃₅ |
| | 75 | 6300 | 6300 | 5100 | 5100 | 4400 ₅ | 4300 ₅ | 3600 ₂₅ | 3600 ₂₅ | 3000 ₄₅ | 3000 ₄₅ |
| 330x85 | 40 | 7300 | 7500 | 5900 | 5900 | 5000 ₁₀ | 5000 ₁₀ | 4400 ₃₀ | 4400 ₃₀ | 3700 ₅₀ | 3400 ₄₀ |
| | 75 | 6800 | 6900 | 5500 | 5500 | 4800 ₁₅ | 4700 ₁₅ | 4100 ₄₀ | 4100 ₄₀ | 3300 ₆₅ | 3300 ₅₅ |
| 360x85 | 40 | 7700 | 8000 | 6300 | 6300 | 5400 ₁₅ | 5400 ₁₅ | 4800 ₄₀ | 4700 ₄₀ | 4000 ₆₅ | 4000 ₆₅ |
| | 75 | 7200 | 7300 | 5900 | 5900 | 5100 ₂₀ | 5100 ₂₀ | 4400 ₅₀ | 4400 ₅₀ | 3700 ₈₅ | 3400 ₆₅ |
| 395x85 | 40 | 8100 | 8600 | 6700 | 6700 | 5800 ₂₀ | 5800 ₂₀ | 5100 ₅₀ | 5100 ₅₀ | 4400 ₉₀ | 4400 ₉₀ |
| | 75 | 7600 | 7800 | 6300 | 6300 | 5400 ₂₅ | 5400 ₂₅ | 4900 ₆₅ | 4800 ₆₅ | 4100 ₁₀₅ | 3600 ₈₅ |
| 425x85 | 40 | 8500 | 9000 | 7000 | 7100 | 6100 ₂₅ | 6100 ₂₅ | 5400 ₅₅ | 5400 ₅₅ | 4800 ₁₀₀ | 4700 ₁₀₀ |
| | 75 | 7900 | 8300 | 6600 | 6600 | 5700 ₃₀ | 5800 ₃₀ | 5100 ₈₅ | 5100 ₈₀ | 4400 ₁₁₅ | 4400 ₁₁₅ |
| 460x85 | 40 | 8900 | 9600 | 7400 | 7600 | 6500 ₃₅ | 6500 ₃₅ | 5700 ₇₅ | 5700 ₇₀ | 5200 ₁₁₅ | 5100 ₁₁₅ |
| | 75 | 8300 | 8800 | 7000 ₅ | 7000 ₅ | 6100 ₄₀ | 6100 ₄₀ | 5500 ₉₅ | 5400 ₉₅ | 4800 ₁₃₀ | 4600 ₁₂₅ |
| 495x85 | 40 | 9300 | 10100 | 7700 ₅ | 8000 ₅ | 6800 ₄₀ | 6800 ₄₀ | 6000 ₈₅ | 6100 ₈₅ | 5500 ₁₂₅ | 5500 ₁₃₀ |
| | 75 | 8700 | 9200 | 7300 ₁₀ | 7400 ₁₀ | 6400 ₄₅ | 6500 ₄₅ | 5800 ₁₀₀ | 5800 ₁₀₀ | 5100 ₁₄₅ | 5000 ₁₄₅ |
| 525x85 | 40 | 9600 | 10500 | 8000 ₅ | 8300 ₁₀ | 7000 ₄₅ | 7100 ₄₅ | 6300 ₉₅ | 6400 ₉₅ | 5700 ₁₃₅ | 5700 ₁₄₀ |
| | 75 | 9000 | 9600 | 7600 ₁₀ | 7800 ₁₅ | 6700 ₅₀ | 6700 ₅₀ | 6000 ₁₁₀ | 6000 ₁₁₀ | 5400 ₁₆₀ | 5100 ₁₅₀ |
| 560x85 | 40 | 10000 | 11000 | 8300 ₁₀ | 8700 ₁₅ | 7300 ₄₅ | 7500 ₅₀ | 6600 ₁₀₀ | 6600 ₁₀₀ | 6000 ₁₄₅ | 6000 ₁₄₅ |
| | 75 | 9300 | 10100 | 7800 ₁₅ | 8100 ₁₅ | 7000 ₅₅ | 7100 ₆₀ | 6300 ₁₂₀ | 6400 ₁₂₀ | 5800 ₁₇₅ | 5700 ₁₇₀ |
| 590x85 | 40 | 10400 | 11400 | 8500 ₁₀ | 9100 ₁₅ | 7600 ₅₀ | 7800 ₅₅ | 6900 ₁₁₀ | 6900 ₁₁₀ | 6200 ₁₅₅ | 6300 ₁₅₅ |
| | 75 | 9600 | 10500 | 8100 ₁₅ | 8500 ₂₀ | 7200 ₆₀ | 7300 ₆₅ | 6600 ₁₂₅ | 6600 ₁₂₅ | 6000 ₁₈₅ | 6000 ₁₈₅ |

NOTES:

- D = member depth, B = member breadth, NS = not suitable.
- End bearing lengths = 35 mm at end supports and 70 mm at internal supports for continuous members. Subscript values indicate the minimum additional bearing length where required to be greater than 35 mm at end supports and 70 mm at internal supports.
- Restraint value for slenderness calculations is 1200 mm
- Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering

Single span Verandah beam AS 4055 Classification C1, C2 & C3



EXAMPLE:

wind speed = C3
 sheet roof - 40 kg/m²
 roof load width = 3900 mm
 rafter/truss spacing = 600 mm
 verandah span = 3500 mm

Enter span table at 4500 roof load width column, rafter spacing of 1200 mm, and read down to a span equal to or greater than 3500 mm

ADOPT:

SmartLam GL 17C - 260 x 65

| Roof load width (mm) | | 1500 | | 3000 | | 4500 | | 6000 | | 7500 | |
|-------------------------------------|-----------------------------------|----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Rafter/truss spacing (mm) | | 600 | 1200 | 600 | 1200 | 600 | 1200 | 600 | 1200 | 600 | 1200 |
| Member size (GL17C) Dx B (mm) | Roof mass (kg/m ²) | Maximum verandah span (mm) | | | | | | | | | |
| | | Single span | | | | | | | | | |
| 130x65 | 40 | 2700 | 2800 | 1900 | 1800 | 1500 | 1100 | 1300 | NS | NS | NS |
| | 75 | 2400 | 2400 | 1700 | 1600 | 1400 | 1000 | 1100 | NS | NS | NS |
| 165x65 | 40 | 3500 | 3500 | 2400 | 2500 | 1900 | 1800 | 1600 | 1200 | 1400 ₅ | NS |
| | 75 | 3100 | 3100 | 2200 | 2200 | 1800 | 1600 | 1500 | NS | 1300 ₁₀ | NS |
| 195x65 | 40 | 4200 | 4200 | 2900 | 2900 | 2300 | 2300 | 1900 | 1600 ₁₀ | 1600 ₁₀ | NS |
| | 75 | 3700 | 3600 | 2600 | 2700 | 2100 | 2100 | 1800 | 1500 ₁₅ | 1600 ₁₅ | NS |
| 230x65 | 40 | 4800 | 4800 | 3500 | 3500 | 2800 ₅ | 2700 ₁₀ | 2300 ₁₀ | 2200 ₁₅ | 2000 ₁₀ | 1600 ₃₀ |
| | 75 | 4300 | 4300 | 3200 | 3100 | 2500 ₅ | 2600 ₁₀ | 2200 ₁₅ | 2100 ₁₅ | 1900 ₁₀ | 1400 ₁₀ |
| 260x65 | 40 | 5400 | 5400 | 4000 | 4000 ₅ | 3200 | 3100 ₁₀ | 2600 ₁₅ | 2600 ₂₅ | 2300 ₂₅ | 1800 ₂₅ |
| | 75 | 4800 | 4800 | 3600 | 3600 | 2900 ₁₀ | 2900 ₁₅ | 2500 ₂₀ | 2400 ₃₀ | 2200 ₃₅ | 1700 ₃₀ |
| 295x65 | 40 | 6100 | 6000 | 4500 | 4400 | 3600 ₁₅ | 3500 ₁₀ | 3000 ₂₀ | 2900 ₃₅ | 2600 ₃₅ | 2500 ₄₅ |
| | 75 | 5400 | 5400 | 4100 ₅ | 4100 ₁₀ | 3300 ₅ | 3300 ₁₅ | 2800 ₃₀ | 2800 ₃₀ | 2500 ₄₀ | 2000 ₂₅ |
| 330x65 | 40 | 6700 | 6700 | 4900 ₅ | 4900 ₁₀ | 4100 ₂₀ | 4000 ₁₅ | 3400 ₁₅ | 3200 ₃₀ | 2900 ₄₅ | 2800 ₄₅ |
| | 75 | 6000 | 5900 | 4500 | 4500 ₅ | 3800 ₂₀ | 3700 ₁₅ | 3200 ₂₅ | 3100 ₃₅ | 2800 ₄₀ | 2700 ₅₅ |
| 360x65 | 40 | 7300 | 7300 | 5300 ₁₀ | 5300 ₁₅ | 4400 ₂₀ | 4400 ₂₅ | 3700 ₃₅ | 3600 ₃₀ | 3200 ₄₀ | 3100 ₅₅ |
| | 75 | 6500 | 6500 | 4900 ₁₀ | 4900 ₁₅ | 4100 ₂₀ | 4100 ₂₀ | 3500 ₄₀ | 3400 ₃₅ | 3100 ₄₅ | 2900 ₆₅ |
| 395x65 | 40 | 8000 | 8000 | 5800 ₅ | 5800 ₁₀ | 4800 ₃₀ | 4700 ₃₅ | 4100 ₃₅ | 4000 ₃₅ | 3500 ₃₅ | 3400 ₅₀ |
| | 75 | 7100 | 7100 | 5300 ₁₀ | 5300 ₁₅ | 4400 ₂₅ | 4400 ₃₀ | 3900 ₄₀ | 3800 ₃₅ | 3400 ₄₀ | 3200 ₆₀ |
| 425x65 | 40 | 8700 | 8700 | 6200 ₁₅ | 6200 ₁₀ | 5100 ₃₀ | 5100 ₃₅ | 4400 ₄₅ | 4300 ₅₅ | 3800 ₆₀ | 3600 ₄₅ |
| | 75 | 7600 | 7600 | 5700 ₁₀ | 5700 ₁₅ | 4800 ₃₅ | 4700 ₃₀ | 4200 ₄₀ | 4100 ₄₀ | 3700 ₆₅ | 3500 ₅₅ |
| 460x65 | 40 | 9400 | 9400 | 6700 ₂₀ | 6700 ₂₅ | 5500 ₃₅ | 5500 ₄₅ | 4700 ₅₅ | 4700 ₅₀ | 4100 ₆₀ | 4000 ₅₀ |
| | 75 | 8300 | 8300 | 6100 ₂₀ | 6100 ₁₅ | 5100 ₃₅ | 5100 ₄₀ | 4500 ₅₀ | 4400 ₆₀ | 3900 ₆₅ | 3800 ₅₅ |
| 495x65 | 40 | 10200 | 10200 ₅ | 7300 ₂₅ | 7200 ₂₅ | 5900 ₃₅ | 5800 ₄₀ | 5000 ₅₅ | 5000 ₆₅ | 4400 ₇₅ | 4400 ₉₀ |
| | 75 | 8900 | 8900 | 6600 ₂₀ | 6600 ₁₅ | 5500 ₃₅ | 5400 ₄₀ | 4800 ₆₅ | 4700 ₇₅ | 4200 ₆₅ | 4200 ₆₀ |

Single span Verandah beam AS 4055 Classification C1, C2 & C3 [Cont'd]

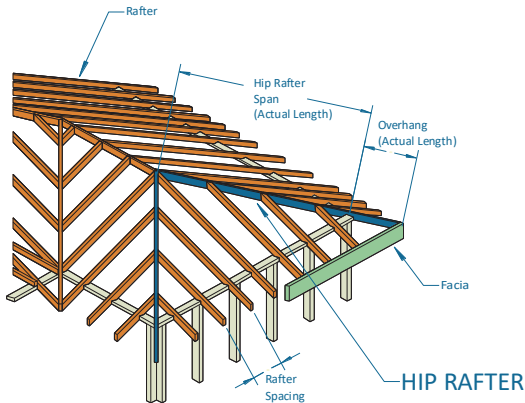
| Roof load width (mm) | | 1500 | | 3000 | | 4500 | | 6000 | | 7500 | |
|------------------------------------|-----------------------------------|--|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Rafter/truss spacing (mm) | | 600 | 1200 | 600 | 1200 | 600 | 1200 | 600 | 1200 | 600 | 1200 |
| Member size (GL17C) DxB (mm) | Roof mass (kg/m ²) | Maximum recommended verandah span (mm) | | | | | | | | | |
| | | Single span | | | | | | | | | |
| 130x85 | 40 | 3000 | 3000 | 2100 | 2100 | 1600 | 1400 | 1400 | 1000 | 1200 | NS |
| | 75 | 2600 | 2700 | 1900 | 1900 | 1500 | 1300 | 1300 | NS | 1100 | NS |
| 165x85 | 40 | 3900 | 3900 | 2700 | 2700 | 2100 | 2100 | 1800 | 1600 | 1500 | 1100 |
| | 75 | 3400 | 3300 | 2400 | 2500 | 1900 | 1900 | 1600 | 1500 ₅ | 1500 ₅ | NS |
| 195x85 | 40 | 4500 | 4500 | 3200 | 3200 | 2500 | 2600 | 2100 | 2100 | 1800 | 1600 ₁₀ |
| | 75 | 4000 | 4000 | 2900 | 2900 | 2300 | 2300 | 2000 | 1900 ₅ | 1700 | 1500 ₂₀ |
| 230x85 | 40 | 5200 | 5200 | 3900 | 3800 | 3000 | 3000 | 2500 ₅ | 2600 ₁₅ | 2200 ₁₀ | 2200 ₁₅ |
| | 75 | 4600 | 4600 | 3500 | 3400 | 2800 | 2800 ₅ | 2400 ₁₀ | 2300 ₁₅ | 2100 ₅ | 2000 ₁₅ |
| 260x85 | 40 | 5800 | 5800 | 4300 | 4300 | 3500 | 3400 | 2900 ₁₀ | 2900 ₁₅ | 2500 ₂₀ | 2500 ₃₀ |
| | 75 | 5200 | 5200 | 4000 | 3900 | 3200 | 3200 | 2700 ₁₀ | 2700 ₂₅ | 2400 ₂₀ | 2300 ₃₅ |
| 295x85 | 40 | 6500 | 6500 | 4800 | 4800 | 4000 ₅ | 4000 ₅ | 3400 ₅ | 3300 ₁₅ | 2900 ₂₅ | 2900 ₃₅ |
| | 75 | 5800 | 5800 | 4400 | 4400 | 3700 ₁₀ | 3600 ₅ | 3100 ₁₀ | 3100 ₂₀ | 2700 ₂₀ | 2800 ₃₅ |
| 330x85 | 40 | 7300 | 7300 | 5300 | 5300 | 4400 ₅ | 4400 ₁₀ | 3800 ₂₀ | 3700 ₁₅ | 3300 ₂₀ | 3200 ₃₀ |
| | 75 | 6500 | 6500 | 4900 | 4900 ₅ | 4100 ₁₀ | 4100 ₂₀ | 3500 ₂₅ | 3500 ₂₀ | 3100 ₂₅ | 3100 ₄₀ |
| 360x85 | 40 | 7900 | 7900 | 5800 | 5800 | 4800 ₁₅ | 4700 ₁₀ | 4100 ₂₀ | 4100 ₂₀ | 3600 ₄₀ | 3500 ₃₀ |
| | 75 | 7000 | 7000 | 5300 | 5300 ₅ | 4400 ₁₀ | 4400 ₁₅ | 3900 ₂₅ | 3800 ₂₀ | 3400 ₂₀ | 3300 ₃₅ |
| 395x85 | 40 | 8700 | 8700 | 6300 ₅ | 6300 | 5200 ₁₅ | 5200 ₂₀ | 4500 ₂₅ | 4400 ₃₀ | 4000 ₄₀ | 3900 ₃₅ |
| | 75 | 7700 | 7700 | 5800 | 5700 ₅ | 4800 ₂₀ | 4800 ₂₅ | 4200 ₃₀ | 4200 ₄₀ | 3800 ₄₅ | 3700 ₃₅ |
| 425x85 | 40 | 9400 | 9400 | 6800 ₅ | 6800 ₁₀ | 5500 ₂₀ | 5500 ₂₅ | 4800 ₃₅ | 4700 ₄₅ | 4200 ₅₀ | 4200 ₃₅ |
| | 75 | 8300 | 8300 | 6200 ₅ | 6200 ₅ | 5100 ₂₀ | 5100 ₂₅ | 4500 ₃₀ | 4500 ₄₀ | 4000 ₄₅ | 4000 ₄₀ |
| 460x85 | 40 | 10300 | 10200 | 7300 ₁₀ | 7300 ₁₅ | 6000 ₂₅ | 5900 ₂₀ | 5100 ₃₅ | 5100 ₄₅ | 4600 ₄₅ | 4500 ₅₅ |
| | 75 | 9000 | 9000 | 6700 ₁₀ | 6700 ₁₅ | 5500 ₂₅ | 5500 ₃₀ | 4800 ₄₀ | 4800 ₅₀ | 4300 ₅₅ | 4300 ₆₅ |
| 495x85 | 40 | 11100 | 11100 | 7900 ₁₀ | 7900 ₁₅ | 6400 ₂₅ | 6400 ₂₀ | 5500 ₃₅ | 5500 ₄₅ | 4900 ₆₀ | 4800 ₇₀ |
| | 75 | 9800 | 9700 | 7200 ₁₅ | 7200 ₂₀ | 5900 ₃₀ | 5900 ₃₀ | 5200 ₄₀ | 5100 ₅₀ | 4600 ₅₀ | 4600 ₆₅ |
| 525x85 | 40 | 11900 | 11800 | 8400 ₁₅ | 8400 ₁₅ | 6800 ₃₀ | 6800 ₄₀ | 5800 ₄₅ | 5800 ₅₀ | 5100 ₆₀ | 5100 ₇₀ |
| | 75 | 10400 | 10400 | 7600 ₁₅ | 7600 ₂₀ | 6300 ₃₀ | 6200 ₂₅ | 5400 ₄₀ | 5400 ₅₀ | 4900 ₆₅ | 4800 ₇₅ |
| 560x85 | 40 | 12000 | 12000 | 9000 ₁₅ | 9000 ₁₅ | 7200 ₃₅ | 7200 ₄₀ | 6200 ₅₀ | 6100 ₄₅ | 5400 ₆₀ | 5400 ₇₀ |
| | 75 | 11200 | 11100 | 8100 ₂₀ | 8100 ₂₅ | 6700 ₃₀ | 6700 ₂₅ | 5800 ₅₀ | 5800 ₆₀ | 5200 ₆₅ | 5200 ₇₅ |
| 590x85 | 40 | 12000 | 12000 | 9500 ₂₅ | 9500 ₂₅ | 7600 ₄₀ | 7600 ₄₀ | 6500 ₅₀ | 6500 ₄₅ | 5700 ₇₀ | 5700 ₈₅ |
| | 75 | 11900 | 11800 ₅ | 8600 ₂₀ | 8600 ₂₀ | 7000 ₃₅ | 7000 ₄₅ | 6100 ₆₀ | 6100 ₅₅ | 5400 ₆₅ | 5400 ₇₅ |

NOTES:

1. D = member depth, B = member breadth, NS = not suitable.
2. End bearing lengths = 35 mm at end supports and 70 mm at internal supports for continuous members. Subscript values indicate the minimum additional bearing length where required to be greater than 35 mm at end supports and 70 mm at internal supports.
3. Restraint value for slenderness calculations is 1200 mm
4. Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering

Hip rafter - sheet and tile roof

AS 4055 Classification N1, N2, N3, N4, C1, C2 & C3



EXAMPLE:

wind speed = N3
 roof load = 40 kg/m² (sheet roof)
 hip rafter span = 4500 mm (single span)
 rafter spacing = 600 mm

Enter column at (N1,N2 & N3) wind speed, 600 mm rafter spacing and read down to span equal to or greater than 4500 mm for a 40 kg/m² roof load

ADOPT:

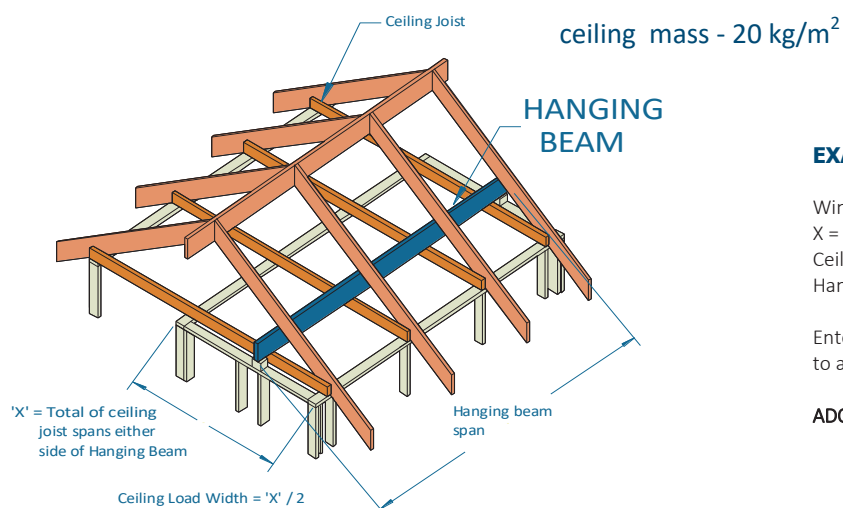
SmartLam GL 17C — 230 x 65

| Wind speed | | N1, N2, N3 & N4 | | | | C1, C2 & C3 | | | |
|-------------------------|--|--|----------|------|----------|-------------|----------|------|----------|
| Rafter spacing (mm) | | 600 | | 1200 | | 600 | | 1200 | |
| Member size (GL17C) DxB | Roof & ceiling mass (kg/m ²) | Maximum recommended rafter span + overhang span (mm) | | | | | | | |
| | | Span | Overhang | Span | Overhang | Span | Overhang | Span | Overhang |
| 130x65 | 40 | 3800 | 750 | 3800 | 750 | 3300 | 650 | 3300 | 650 |
| | 75 | 3250 | 650 | 3250 | 650 | 3250 | 650 | 3250 | 650 |
| 165x65 | 40 | 4550 | 900 | 4550 | 900 | 3900 | 775 | 3900 | 775 |
| | 75 | 3900 | 775 | 3900 | 775 | 3900 | 775 | 3900 | 775 |
| 195x65 | 40 | 5200 | 1000 | 5200 | 1000 | 4350 | 850 | 4350 | 850 |
| | 75 | 4450 | 850 | 4450 | 850 | 4450 | 850 | 4450 | 850 |
| 230x65 | 40 | 5950 | 1150 | 5950 | 1150 | 4850 | 950 | 4850 | 950 |
| | 75 | 5050 | 1000 | 5050 | 1000 | 4950 | 950 | 4950 | 950 |
| 260x65 | 40 | 6450 | 1250 | 6450 | 1250 | 5250 | 1050 | 5250 | 1050 |
| | 75 | 5600 | 1100 | 5600 | 1100 | 5350 | 1050 | 5350 | 1050 |
| 295x65 | 40 | 7050 | 1400 | 7050 | 1400 | 5700 | 1100 | 5700 | 1100 |
| | 75 | 6150 | 1225 | 6150 | 1225 | 5850 | 1150 | 5850 | 1150 |
| 330x65 | 40 | 7600 | 1500 | 7600 | 1500 | 6150 | 1225 | 6150 | 1225 |
| | 75 | 6650 | 1325 | 6650 | 1325 | 6300 | 1250 | 6300 | 1250 |
| 360x65 | 40 | 8100 | 1600 | 8100 | 1600 | 6550 | 1300 | 6550 | 1300 |
| | 75 | 7050 | 1400 | 7050 | 1400 | 6650 | 1325 | 6650 | 1325 |
| 395x65 | 40 | 8650 | 1725 | 8650 | 1725 | 6950 | 1350 | 6950 | 1350 |
| | 75 | 7500 | 1500 | 7500 | 1500 | 7100 | 1400 | 7100 | 1400 |
| 425x65 | 40 | 9100 | 1800 | 9100 | 1800 | 7300 | 1450 | 7300 | 1450 |
| | 75 | 7900 | 1575 | 7900 | 1575 | 7450 | 1450 | 7450 | 1450 |
| 130x85 | 40 | 4050 | 800 | 4050 | 800 | 3600 | 700 | 3600 | 700 |
| | 75 | 3450 | 650 | 3450 | 650 | 3450 | 650 | 3450 | 650 |
| 165x85 | 40 | 4850 | 950 | 4850 | 950 | 4250 | 850 | 4250 | 850 |
| | 75 | 4150 | 825 | 4150 | 825 | 4150 | 825 | 4150 | 825 |
| 195x85 | 40 | 5550 | 1100 | 5550 | 1100 | 4750 | 950 | 4750 | 950 |
| | 75 | 4750 | 950 | 4750 | 950 | 4750 | 950 | 4750 | 950 |
| 230x85 | 40 | 6300 | 1250 | 6300 | 1250 | 5300 | 1050 | 5300 | 1050 |
| | 75 | 5400 | 1075 | 5400 | 1075 | 5400 | 1075 | 5400 | 1075 |
| 260x85 | 40 | 6850 | 1350 | 6850 | 1350 | 5750 | 1150 | 5750 | 1150 |
| | 75 | 6000 | 1200 | 6000 | 1200 | 5850 | 1150 | 5850 | 1150 |
| 295x85 | 40 | 7450 | 1450 | 7450 | 1450 | 6250 | 1250 | 6250 | 1250 |
| | 75 | 6500 | 1300 | 6500 | 1300 | 6350 | 1250 | 6350 | 1250 |
| 330x85 | 40 | 8050 | 1600 | 8050 | 1600 | 6750 | 1350 | 6750 | 1350 |
| | 75 | 7050 | 1400 | 7050 | 1400 | 6850 | 1350 | 6850 | 1350 |
| 360x85 | 40 | 8600 | 1700 | 8600 | 1700 | 7150 | 1425 | 7150 | 1425 |
| | 75 | 7450 | 1450 | 7450 | 1450 | 7250 | 1450 | 7250 | 1450 |
| 395x85 | 40 | 9150 | 1825 | 9150 | 1825 | 7600 | 1500 | 7600 | 1500 |
| | 75 | 7950 | 1550 | 7950 | 1550 | 7750 | 1550 | 7750 | 1550 |
| 425x85 | 40 | 9700 | 1900 | 9700 | 1900 | 8000 | 1600 | 8000 | 1600 |
| | 75 | 8400 | 1675 | 8400 | 1675 | 8100 | 1600 | 8100 | 1600 |

NOTES:

- D = member depth, B = member breadth, NS = not suitable.
- The above table was based on a batten spacing of 900 mm
- Minimum Backspan = 200 % of overhang
- Maximum Birdsmouth depth = 30 % of depth
- End bearing length = 35 at end supports and 35 mm. Subscript values indicate the minimum additional bearing length where required to be greater than 35 mm at end support.
- Construction loads shall not be applied to overhangs until a 190 x 19 mm (min) timber fascia or other fascia of equivalent stiffness is rigidly and permanently attached to the end of rafter overhangs
- Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering

Hanging beam supporting ceiling loads only AS 4055 Classification N1, N2, N3 & N4



EXAMPLE:

Wind speed = N3
 X = 5000 mm
 Ceiling load width = X/2 = 5000/2 = 2500 mm
 Hanging beam span = 4200 mm

Enter column at 3000 mm ceiling load width & read down to a span greater than or equal to 4200 mm

ADOPT:

SmartLam GL 17C - 195 x 65

| Ceiling load width (mm) | 1800 | 2400 | 3000 | 3600 | 4200 | 4800 |
|------------------------------|--|-------|-------|-------|-------|-------|
| Member size (GL17C) DxB (mm) | Maximum recommended Hanging beam span (mm) | | | | | |
| 130x65 | 4050 | 3650 | 3350 | 3100 | 2900 | 2750 |
| 165x65 | 5050 | 4650 | 4300 | 3950 | 3700 | 3500 |
| 195x65 | 5800 | 5350 | 4950 | 4700 | 4450 | 4150 |
| 230x65 | 6700 | 6150 | 5700 | 5400 | 5100 | 4850 |
| 260x65 | 7500 | 6850 | 6350 | 6000 | 5650 | 5400 |
| 295x65 | 8400 | 7650 | 7100 | 6700 | 6300 | 6000 |
| 330x65 | 9350 | 8500 | 7900 | 7400 | 7000 | 6650 |
| 360x65 | 10150 | 9250 | 8550 | 8000 | 7600 | 7200 |
| 395x65 | 11150 | 10150 | 9350 | 8750 | 8250 | 7850 |
| 425x65 | 12000 | 10900 | 10100 | 9400 | 8900 | 8450 |
| 460x65 | 12000 | 11850 | 10900 | 10200 | 9600 | 9100 |
| 495x65 | 12000 | 12000 | 11800 | 11000 | 10350 | 9800 |
| 130x85 | 4450 | 4000 | 3650 | 3400 | 3150 | 3000 |
| 165x85 | 5400 | 4950 | 4650 | 4350 | 4050 | 3850 |
| 195x85 | 6200 | 5700 | 5350 | 5000 | 4750 | 4550 |
| 230x85 | 7200 | 6600 | 6150 | 5800 | 5500 | 5250 |
| 260x85 | 8000 | 7350 | 6850 | 6450 | 6100 | 5800 |
| 295x85 | 9000 | 8250 | 7650 | 7200 | 6800 | 6500 |
| 330x85 | 10000 | 9150 | 8500 | 8000 | 7550 | 7200 |
| 360x85 | 10900 | 9950 | 9250 | 8650 | 8200 | 7800 |
| 395x85 | 11950 | 10900 | 10100 | 9500 | 8950 | 8500 |
| 425x85 | 12000 | 11750 | 10900 | 10200 | 9600 | 9150 |
| 460x85 | 12000 | 12000 | 11800 | 11050 | 10400 | 9900 |
| 495x85 | 12000 | 12000 | 12000 | 11950 | 11250 | 10650 |
| 525x85 | 12000 | 12000 | 12000 | 12000 | 11950 | 11300 |
| 560x85 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| 590x85 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |

NOTES:

1. D = member depth, B = member breadth, NS = not suitable
2. The above table was based on a maximum ceiling mass of 20 kg/m²
3. Minimum bearing length = 70 mm at end supports
4. Restraint value for slenderness calculations is 1500 mm
5. Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering

Hanging beam supporting ceiling loads only AS 4055 Classification C1, C2 & C3

Ceiling mass - 20 kg/m²

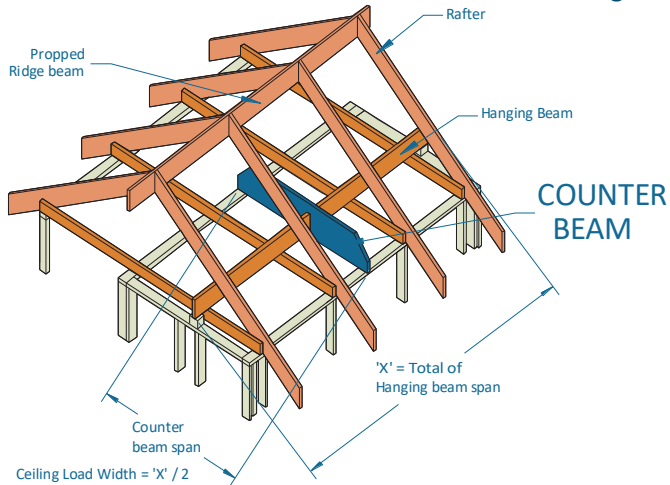
| Ceiling load width (mm) | 1800 | 2400 | 3000 | 3600 | 4200 | 4800 |
|------------------------------|--|-------|-------|-------|-------|-------|
| Member size (GL17C) DxB (mm) | Maximum recommended Hanging beam span (mm) | | | | | |
| 130x65 | 3450 | 2950 | 2650 | 2400 | 2250 | 2100 |
| 165x65 | 4350 | 3750 | 3350 | 3050 | 2850 | 2650 |
| 195x65 | 5150 | 4450 | 4000 | 3600 | 3350 | 3100 |
| 230x65 | 6050 | 5250 | 4700 | 4250 | 3950 | 3700 |
| 260x65 | 6850 | 5900 | 5300 | 4800 | 4450 | 4150 |
| 295x65 | 7750 | 6700 | 6000 | 5450 | 5050 | 4700 |
| 330x65 | 8650 | 7500 | 6700 | 6100 | 5650 | 5300 |
| 360x65 | 9400 | 8150 | 7300 | 6650 | 6150 | 5750 |
| 395x65 | 10300 | 8950 | 8000 | 7300 | 6750 | 6300 |
| 425x65 | 11100 | 9650 | 8600 | 7850 | 7250 | 6800 |
| 460x65 | 12000 | 10400 | 9300 | 8500 | 7850 | 7350 |
| 495x65 | 12000 | 11200 | 10000 | 9150 | 8450 | 7900 |
| 130x85 | 3900 | 3400 | 3050 | 2750 | 2550 | 2400 |
| 165x85 | 4950 | 4300 | 3850 | 3500 | 3250 | 3000 |
| 195x85 | 5850 | 5100 | 4550 | 4150 | 3800 | 3550 |
| 230x85 | 6900 | 6000 | 5350 | 4900 | 4500 | 4200 |
| 260x85 | 7800 | 6750 | 6050 | 5500 | 5100 | 4750 |
| 295x85 | 8800 | 7650 | 6850 | 6250 | 5750 | 5400 |
| 330x85 | 9850 | 8550 | 7650 | 6950 | 6450 | 6000 |
| 360x85 | 10700 | 9300 | 8350 | 7600 | 7050 | 6550 |
| 395x85 | 11750 | 10200 | 9150 | 8350 | 7700 | 7200 |
| 425x85 | 12000 | 10950 | 9800 | 8950 | 8300 | 7750 |
| 460x85 | 12000 | 11850 | 10600 | 9700 | 8950 | 8350 |
| 495x85 | 12000 | 12000 | 11400 | 10400 | 9650 | 9000 |
| 525x85 | 12000 | 12000 | 12000 | 11050 | 10200 | 9550 |
| 560x85 | 12000 | 12000 | 12000 | 11750 | 10900 | 10150 |
| 590x85 | 12000 | 12000 | 12000 | 12000 | 11450 | 10700 |

NOTES:

1. D = member depth, B = member breadth, NS = not suitable
2. The above table was based on a maximum ceiling mass of 20 kg/m²
3. Minimum bearing length = 70 mm at end supports
4. Restraint value for slenderness calculations is 1500 mm
5. Value in subscript indicate extra bearing length required
6. Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering

Counter beam supporting hanging beam AS 4055 Classification N1, N2, N3 & N4

Ceiling mass - 20 kg/m²



EXAMPLE:

wind speed = N3
total of hanging beam SPAN = 6400 mm
ceiling load width = 'X' / 2 = 6400 / 2 = 3200 mm
counter beam span = 4500 mm

Enter column at 3600 mm ceiling load width and read down to a span greater than or equal to 4500 mm

ADOPT:

SmartLam GL 17C - 165 x 65

| Ceiling load width (mm) | 600 | 1800 | 2400 | 3000 | 3600 | 4200 | 4800 | 5400 | 6600 |
|---------------------------------|--|-------|-------|-------|-------|-------|-------|-------|-------|
| Member size (GL17C) DxB (mm) | Maximum recommended Counter beam span (mm) | | | | | | | | |
| 130x65 | 4700 | 4600 | 4200 | 3900 | 3700 | 3500 | 3350 | 3200 | 3000 |
| 165x65 | 5950 | 5550 | 5200 | 4900 | 4700 | 4500 | 4300 | 4150 | 3850 |
| 195x65 | 7000 | 6400 | 5950 | 5650 | 5400 | 5150 | 5000 | 4850 | 4600 |
| 230x65 | 8250 | 7400 | 6900 | 6500 | 6200 | 5950 | 5750 | 5550 | 5250 |
| 260x65 | 9350 | 8250 | 7700 | 7250 | 6900 | 6600 | 6400 | 6200 | 5850 |
| 295x65 | 10600 | 9300 | 8600 | 8150 | 7750 | 7400 | 7150 | 6900 | 6550 |
| 330x65 | 11850 | 10350 | 9600 | 9050 | 8600 | 8250 | 7950 | 7650 | 7250 |
| 360x65 | 12000 | 11250 | 10450 | 9800 | 9350 | 8950 | 8600 | 8300 | 7850 |
| 395x65 | 12000 | 12000 | 11450 | 10750 | 10250 | 9800 | 9400 | 9100 | 8600 |
| 425x65 | 12000 | 12000 | 12000 | 11600 | 11000 | 10550 | 10100 | 9800 | 9200 |
| 460x65 | 12000 | 12000 | 12000 | 12000 | 11950 | 11400 | 10950 | 10600 | 9950 |
| 495x65 | 10500 | 12000 | 12000 | 12000 | 12000 | 12000 | 11850 | 11400 | 10750 |
| 130x85 | 5100 | 4900 | 4550 | 4250 | 4050 | 3850 | 3650 | 3550 | 3300 |
| 165x85 | 6500 | 5950 | 5550 | 5250 | 5000 | 4800 | 4650 | 4500 | 4250 |
| 195x85 | 7650 | 6850 | 6400 | 6050 | 5750 | 5550 | 5350 | 5200 | 4900 |
| 230x85 | 9050 | 7900 | 7350 | 6950 | 6650 | 6400 | 6150 | 5950 | 5650 |
| 260x85 | 10200 | 8800 | 8200 | 7750 | 7400 | 7100 | 6850 | 6650 | 6300 |
| 295x85 | 11600 | 9900 | 9250 | 8750 | 8300 | 8000 | 7700 | 7450 | 7050 |
| 330x85 | 12000 | 11050 | 10300 | 9700 | 9250 | 8850 | 8550 | 8250 | 7800 |
| 360x85 | 12000 | 12000 | 11200 | 10550 | 10050 | 9650 | 9300 | 9000 | 8500 |
| 395x85 | 12000 | 12000 | 12000 | 11600 | 11000 | 10550 | 10150 | 9850 | 9300 |
| 425x85 | 12000 | 12000 | 12000 | 12000 | 11850 | 11350 | 10950 | 10600 | 9950 |
| 460x85 | 11350 | 12000 | 12000 | 12000 | 12000 | 12000 | 11850 | 11450 | 10800 |
| 495x85 | 10100 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 11650 |
| 525x85 | 9750 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| 560x85 | 9450 | 10950 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |
| 590x85 | 9300 | 10150 | 11350 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 |

Counter beam supporting Hanging beam AS 4055 Classification C1, C2 and C3

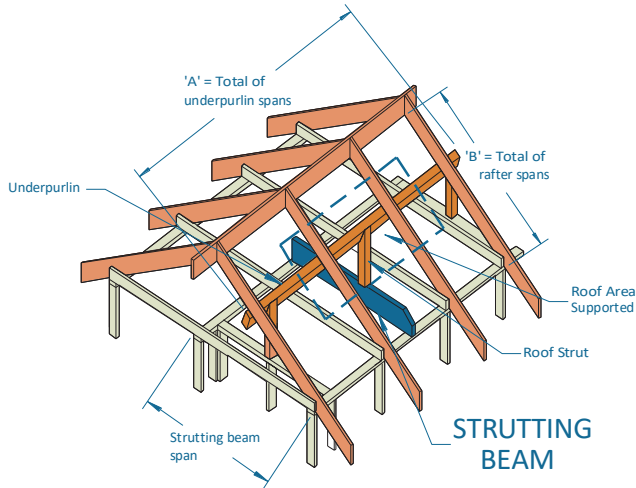
Ceiling mass - 20 kg/m²

| Ceiling load width (mm) | 600 | 1800 | 2400 | 3000 | 3600 | 4200 | 4800 | 5400 | 6600 |
|---------------------------------|--|-------|-------|-------|-------|-------|-------|-------|------|
| Member size (GL17C) DxB (mm) | Maximum recommended Counter beam span (mm) | | | | | | | | |
| 130x65 | 4700 | 3450 | 3000 | 2700 | 2450 | 2300 | 2150 | 2000 | 1800 |
| 165x65 | 5950 | 4400 | 3800 | 3400 | 3100 | 2900 | 2700 | 2550 | 2300 |
| 195x65 | 7000 | 5200 | 4500 | 4050 | 3700 | 3400 | 3200 | 3000 | 2750 |
| 230x65 | 8250 | 6100 | 5300 | 4750 | 4350 | 4000 | 3750 | 3550 | 3200 |
| 260x65 | 9350 | 6900 | 6000 | 5350 | 4900 | 4550 | 4250 | 4000 | 3650 |
| 295x65 | 10600 | 7800 | 6800 | 6100 | 5550 | 5150 | 4800 | 4550 | 4100 |
| 330x65 | 11850 | 8700 | 7600 | 6800 | 6200 | 5750 | 5400 | 5100 | 4600 |
| 360x65 | 12000 | 9500 | 8250 | 7400 | 6750 | 6300 | 5900 | 5550 | 5000 |
| 395x65 | 12000 | 10400 | 9050 | 8100 | 7450 | 6900 | 6450 | 6100 | 5500 |
| 425x65 | 12000 | 11200 | 9750 | 8750 | 8000 | 7400 | 6950 | 6550 | 5900 |
| 460x65 | 12000 | 12000 | 10500 | 9450 | 8650 | 8000 | 7500 | 7100 | 6400 |
| 495x65 | 10500 | 12000 | 11300 | 10150 | 9300 | 8600 | 8050 | 7600 | 6900 |
| 130x85 | 5100 | 3950 | 3450 | 3100 | 2800 | 2600 | 2450 | 2300 | 2100 |
| 165x85 | 6500 | 5000 | 4350 | 3900 | 3550 | 3300 | 3100 | 2900 | 2650 |
| 195x85 | 7650 | 5900 | 5150 | 4600 | 4200 | 3900 | 3650 | 3450 | 3100 |
| 230x85 | 9050 | 6950 | 6050 | 5400 | 4950 | 4600 | 4300 | 4050 | 3650 |
| 260x85 | 10200 | 7850 | 6850 | 6100 | 5600 | 5200 | 4850 | 4600 | 4150 |
| 295x85 | 11600 | 8900 | 7750 | 6950 | 6350 | 5900 | 5500 | 5200 | 4700 |
| 330x85 | 12000 | 9900 | 8650 | 7750 | 7100 | 6550 | 6150 | 5800 | 5250 |
| 360x85 | 12000 | 10800 | 9400 | 8450 | 7750 | 7150 | 6700 | 6350 | 5750 |
| 395x85 | 12000 | 11850 | 10300 | 9250 | 8450 | 7850 | 7350 | 6950 | 6300 |
| 425x85 | 12000 | 12000 | 11100 | 9950 | 9100 | 8450 | 7900 | 7450 | 6750 |
| 460x85 | 11300 | 12000 | 11950 | 10750 | 9850 | 9150 | 8550 | 8050 | 7300 |
| 495x85 | 10100 | 12000 | 12000 | 11550 | 10600 | 9800 | 9200 | 8700 | 7850 |
| 525x85 | 9750 | 12000 | 12000 | 12000 | 11200 | 10400 | 9750 | 9200 | 8350 |
| 560x85 | 9450 | 10950 | 12000 | 12000 | 11950 | 11100 | 10400 | 9800 | 8900 |
| 590x85 | 9300 | 10150 | 11350 | 12000 | 12000 | 11650 | 10950 | 10350 | 9350 |

NOTES:

1. D = member depth, B = member breadth, NS = not suitable
2. The above table was based on a maximum ceiling mass of 20 kg/m²
3. Minimum bearing length = 70 mm at end supports
4. Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering

Strutting beam supporting underpurlins AS 4055 Classification N1, N2, N3 & N4



EXAMPLE:

wind speed = N3
 sheet roof = 20 kg/m²
 total of underpurlin span 'A' = 5000 mm
 total of rafter span 'B' = 4200 mm
 roof area supported = (A/2) x (B/2)
 = (5000/2) x (4200/2)
 = 5250000 mm² (convert to m²)
 = 5250000/1000000 = 5.25 m²

strutting beam span = 4500 mm

Enter column at 6m² roof area supported and read down to a span greater than or equal to 4500 mm

ADOPT:

SmartLam GL 17C- 195 x 65

| Roof area supported (m ²) | | 2 | 4 | 6 | 8 | 10 | 12 |
|---------------------------------------|--------------------------------|--|-------|-------|-------|-------|-------|
| Member size (GL17C) Dx B (mm) | Roof mass (kg/m ²) | Maximum recommended Strutting beam span (mm) | | | | | |
| 130x65 | 20 | 5050 | 3600 | 2350 | 1800 | 1400 | 1200 |
| | 60 | 3600 | 2550 | 2050 | 1550 | 1250 | 1050 |
| 165x65 | 20 | 6500 | 5250 | 3850 | 2850 | 2300 | 1900 |
| | 60 | 5000 | 3700 | 3000 | 2500 | 2000 | 1650 |
| 195x65 | 20 | 7750 | 6350 | 5400 | 4000 | 3200 | 2650 |
| | 60 | 6000 | 4700 | 3900 | 3350 | 2750 | 2300 |
| 230x65 | 20 | 9300 | 7650 | 6700 | 5600 | 4500 | 3700 |
| | 60 | 7300 | 5700 | 4900 | 4400 | 3850 | 3200 |
| 260x65 | 20 | 10600 | 8850 | 7750 | 7000 | 5750 | 4750 |
| | 60 | 8450 | 6600 | 5650 | 5100 | 4700 | 4100 |
| 295x65 | 20 | 12000 | 10300 | 9050 | 8200 | 7450 | 6150 |
| | 60 | 9850 | 7700 | 6600 | 5900 | 5450 | 5050 |
| 330x65 | 20 | 12000 | 11800 | 10450 | 9450 | 8700 | 7750 |
| | 60 | 11300 | 8900 | 7600 | 6800 | 6200 | 5800 |
| 360x65 | 20 | 12000 | 12000 | 11700 | 10600 | 9750 | 9100 |
| | 60 | 12000 | 10000 | 8550 | 7600 | 6950 | 6450 |
| 395x65 | 20 | 12000 | 12000 | 12000 | 12000 | 11050 | 10300 |
| | 60 | 12000 | 11350 | 9700 | 8600 | 7850 | 7250 |
| 425x65 | 20 | 10400 | 10950 | 12000 | 12000 | 12000 | 11450 |
| | 60 | 11200 | 12000 | 10750 | 9550 | 8650 | 8000 |
| 460x65 | 20 | 9850 | 10150 | 10500 | 10900 | 11500 | 12000 |
| | 60 | 10250 | 11300 | 12000 | 10700 | 9700 | 8950 |
| 130x85 | 20 | 5450 | 4400 | 3100 | 2350 | 1850 | 1550 |
| | 60 | 4100 | 2900 | 2350 | 2000 | 1600 | 1350 |
| 165x85 | 20 | 7000 | 5750 | 5000 | 3750 | 3000 | 2500 |
| | 60 | 5450 | 4250 | 3450 | 2950 | 2600 | 2150 |
| 195x85 | 20 | 8300 | 6900 | 6050 | 5300 | 4200 | 3500 |
| | 60 | 6550 | 5200 | 4500 | 3850 | 3450 | 3000 |
| 230x85 | 20 | 9850 | 8300 | 7300 | 6650 | 5900 | 4900 |
| | 60 | 7950 | 6300 | 5400 | 4900 | 4500 | 4100 |
| 260x85 | 20 | 11200 | 9550 | 8450 | 7700 | 7100 | 6300 |
| | 60 | 9150 | 7300 | 6300 | 5650 | 5200 | 4850 |
| 295x85 | 20 | 12000 | 11100 | 9900 | 9000 | 8300 | 7750 |
| | 60 | 10650 | 8500 | 7350 | 6550 | 6000 | 5600 |
| 330x85 | 20 | 12000 | 12000 | 11350 | 10350 | 9600 | 9000 |
| | 60 | 12000 | 9850 | 8450 | 7550 | 6900 | 6450 |
| 360x85 | 20 | 12000 | 12000 | 12000 | 11600 | 10750 | 10100 |
| | 60 | 12000 | 11050 | 9500 | 8500 | 7750 | 7200 |
| 395x85 | 20 | 11500 | 12000 | 12000 | 12000 | 12000 | 11450 |
| | 60 | 12000 | 12000 | 10800 | 9600 | 8800 | 8150 |
| 425x85 | 20 | 10300 | 10700 | 11200 | 12000 | 12000 | 12000 |
| | 60 | 10850 | 12000 | 11950 | 10650 | 9700 | 9000 |
| 460x85 | 20 | 9800 | 10000 | 10250 | 10500 | 10850 | 11250 |
| | 60 | 10100 | 10700 | 11750 | 11950 | 10900 | 10050 |

Strutting beam supporting underpurlins AS 4055 Classification C1, C2 & C3

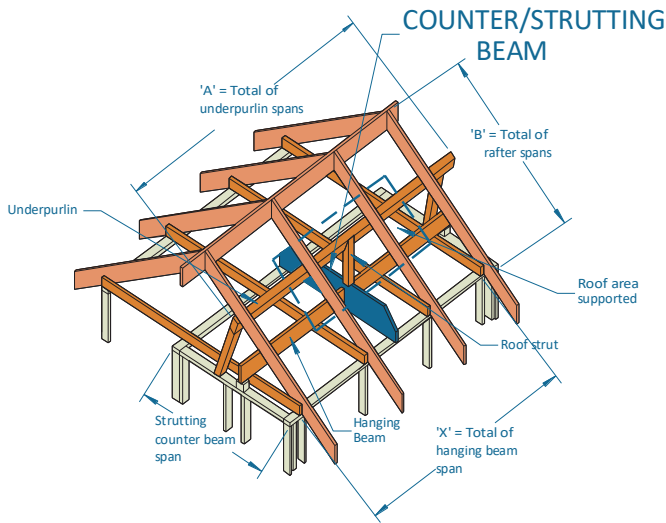
| Roof area supported (m ²) | | 2 | 4 | 6 | 8 | 10 | 12 |
|---------------------------------------|--------------------------------|--|-------|-------|-------|-------|------|
| Member size (GL17C) Dx B (mm) | Roof mass (kg/m ²) | Maximum recommended Strutting beam span (mm) | | | | | |
| 130x65 | 20 | 3150 | 1550 | 1050 | NS | NS | NS |
| | 60 | 3400 | 1700 | 1150 | NS | NS | NS |
| 165x65 | 20 | 5100 | 2500 | 1700 | 1250 | NS | NS |
| | 60 | 5000 | 2750 | 1850 | 1350 | NS | NS |
| 195x65 | 20 | 7200 | 3550 | 2350 | 1750 | 1200 | NS |
| | 60 | 6000 | 3850 | 2550 | 1900 | 1550 | NS |
| 230x65 | 20 | 9300 | 4950 | 3250 | 2450 | 1950 | 1350 |
| | 60 | 7300 | 5400 | 3550 | 2650 | 2150 | 1750 |
| 260x65 | 20 | 10600 | 6350 | 4200 | 3150 | 2500 | 2100 |
| | 60 | 8450 | 6600 | 4550 | 3400 | 2700 | 2250 |
| 295x65 | 20 | 12000 | 8200 | 5400 | 4050 | 3200 | 2700 |
| | 60 | 9850 | 7700 | 5900 | 4400 | 3500 | 2900 |
| 330x65 | 20 | 12000 | 10400 | 6800 | 5050 | 4050 | 3350 |
| | 60 | 11300 | 8900 | 7400 | 5500 | 4400 | 3650 |
| 360x65 | 20 | 12000 | 12000 | 8100 | 6050 | 4800 | 4000 |
| | 60 | 12000 | 10000 | 8550 | 6600 | 5250 | 4350 |
| 395x65 | 20 | 12000 | 12000 | 9850 | 7300 | 5800 | 4850 |
| | 60 | 12000 | 11350 | 9700 | 7950 | 6350 | 5250 |
| 425x65 | 20 | 10400 | 10950 | 11450 | 8500 | 6750 | 5600 |
| | 60 | 11200 | 12000 | 10750 | 9150 | 7350 | 6100 |
| 460x65 | 20 | 9850 | 10150 | 10500 | 9950 | 7900 | 6550 |
| | 60 | 10250 | 11300 | 12000 | 10650 | 8600 | 7150 |
| 130x85 | 20 | 4150 | 2050 | 1350 | 1000 | NS | NS |
| | 60 | 4100 | 2250 | 1500 | 1100 | NS | NS |
| 165x85 | 20 | 6750 | 3300 | 2200 | 1650 | 1300 | NS |
| | 60 | 5450 | 3600 | 2400 | 1800 | 1450 | 1000 |
| 195x85 | 20 | 8300 | 4650 | 3050 | 2300 | 1850 | 1550 |
| | 60 | 6550 | 5050 | 3350 | 2500 | 2000 | 1650 |
| 230x85 | 20 | 9850 | 6500 | 4300 | 3200 | 2550 | 2150 |
| | 60 | 7950 | 6300 | 4650 | 3500 | 2800 | 2300 |
| 260x85 | 20 | 11200 | 8400 | 5500 | 4100 | 3300 | 2750 |
| | 60 | 9150 | 7300 | 6000 | 4450 | 3550 | 2950 |
| 295x85 | 20 | 12000 | 10900 | 7100 | 5300 | 4250 | 3500 |
| | 60 | 10650 | 8500 | 7350 | 5800 | 4600 | 3850 |
| 330x85 | 20 | 12000 | 12000 | 8950 | 6650 | 5300 | 4400 |
| | 60 | 12000 | 9850 | 8450 | 7250 | 5800 | 4800 |
| 360x85 | 20 | 12000 | 12000 | 10750 | 7950 | 6300 | 5250 |
| | 60 | 12000 | 11050 | 9500 | 8500 | 6900 | 5700 |
| 395x85 | 20 | 11500 | 12000 | 12000 | 9650 | 7650 | 6350 |
| | 60 | 12000 | 12000 | 10800 | 9600 | 8300 | 6900 |
| 425x85 | 20 | 10300 | 10700 | 11200 | 11200 | 8900 | 7350 |
| | 60 | 10800 | 12000 | 11950 | 10650 | 9550 | 8000 |
| 460x85 | 20 | 9800 | 10000 | 10250 | 10500 | 10450 | 8650 |
| | 60 | 10100 | 10700 | 11750 | 11950 | 10900 | 9350 |

NOTES:

1. D = member depth, B = member breadth, NS = not suitable.
2. Minimum bearing length = 70 mm at end supports.
3. Restraint value for slenderness calculations is 1500 mm
4. Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering

Strutting/counter beam supporting underpurlins & hanging beam AS 4055 Classification N1, N2, N3 & N4

Ceiling mass - 20 kg/m²



EXAMPLE:

wind speed = N3
 sheet roof = 40kg/m²
 total of underpurlin span 'A' = 5000 mm
 total of rafter span 'B' = 4200 mm
 roof area supported = (A/2) x (B/2)
 = (5000/2) x (4200/2)
 = 5250000 mm² (convert to m²)
 = 5250000/1000000 = 5.25 m²

total of hanging beam span 'X' = 4500 mm
 effective beam spacing = 'X' / 2 = 4500 / 2 = 2250 mm
 strutting/counter beam span = 4500 mm

Enter column at 3600 mm effective beam spacing, 6m² roof area supported and read down to a span greater than or equal to 4500 mm

ADOPT:

SmartLam GL 17C - 260 x 65

| Effective beam spacing (mm) | | 1800 | | | | | | 3600 | | | | | |
|---------------------------------------|--------------------------------|--|-------|-------|-------|-------|------|-------|-------|-------|------|------|------|
| Roof area supported (m ²) | | 2 | 4 | 6 | 8 | 10 | 12 | 2 | 4 | 6 | 8 | 10 | 12 |
| Member size (GL17C) Dx B (mm) | Roof mass (kg/m ²) | Maximum recommended Strutting/Counter beam span (mm) | | | | | | | | | | | |
| 130x65 | 40 | 3350 | 2700 | 2200 | 1700 | 1350 | 1150 | 2950 | 2500 | 2150 | 1650 | 1350 | 1150 |
| | 75 | 2850 | 2150 | 1800 | 1400 | 1150 | NS | 2600 | 2050 | 1750 | 1400 | 1100 | NS |
| 165x65 | 40 | 4300 | 3700 | 3250 | 2700 | 2150 | 1850 | 3850 | 3400 | 3000 | 2600 | 2150 | 1800 |
| | 75 | 3850 | 3100 | 2600 | 2250 | 1800 | 1500 | 3550 | 2900 | 2500 | 2200 | 1800 | 1500 |
| 195x65 | 40 | 5050 | 4400 | 3950 | 3650 | 3000 | 2550 | 4500 | 4050 | 3750 | 3450 | 2900 | 2500 |
| | 75 | 4550 | 3850 | 3300 | 2900 | 2500 | 2100 | 4150 | 3650 | 3150 | 2800 | 2450 | 2100 |
| 230x65 | 40 | 5900 | 5200 | 4750 | 4350 | 4100 | 3500 | 5200 | 4750 | 4400 | 4150 | 3900 | 3400 |
| | 75 | 5400 | 4600 | 4050 | 3700 | 3400 | 2900 | 4900 | 4300 | 3900 | 3600 | 3250 | 2850 |
| 260x65 | 40 | 6700 | 5950 | 5400 | 5000 | 4700 | 4400 | 5850 | 5400 | 5000 | 4700 | 4450 | 4250 |
| | 75 | 6150 | 5250 | 4650 | 4250 | 3950 | 3700 | 5500 | 4900 | 4450 | 4100 | 3850 | 3600 |
| 295x65 | 40 | 7650 | 6850 | 6250 | 5750 | 5400 | 5100 | 6650 | 6150 | 5700 | 5400 | 5100 | 4850 |
| | 75 | 7050 | 6050 | 5350 | 4900 | 4550 | 4250 | 6300 | 5600 | 5100 | 4700 | 4400 | 4150 |
| 330x65 | 40 | 8600 | 7750 | 7100 | 6550 | 6150 | 5800 | 7400 | 6900 | 6450 | 6100 | 5800 | 5500 |
| | 75 | 8000 | 6850 | 6100 | 5600 | 5200 | 4850 | 7050 | 6300 | 5750 | 5350 | 5000 | 4700 |
| 360x65 | 40 | 9450 | 8550 | 7850 | 7300 | 6850 | 6450 | 8100 | 7550 | 7100 | 6700 | 6400 | 6100 |
| | 75 | 8800 | 7600 | 6800 | 6200 | 5750 | 5400 | 7700 | 6950 | 6350 | 5900 | 5500 | 5200 |
| 395x65 | 40 | 10450 | 9550 | 8800 | 8150 | 7650 | 7250 | 8950 | 8350 | 7900 | 7450 | 7100 | 6800 |
| | 75 | 9800 | 8500 | 7600 | 6950 | 6450 | 6050 | 8500 | 7700 | 7050 | 6550 | 6150 | 5800 |
| 425x65 | 40 | 11350 | 10400 | 9600 | 8950 | 8400 | 7950 | 9650 | 9050 | 8550 | 8100 | 7750 | 7400 |
| | 75 | 10650 | 9350 | 8350 | 7650 | 7050 | 6600 | 9250 | 8400 | 7700 | 7150 | 6700 | 6350 |
| 460x65 | 40 | 12000 | 11450 | 10600 | 9900 | 9300 | 8800 | 10500 | 9900 | 9400 | 8900 | 8500 | 8150 |
| | 75 | 11700 | 10300 | 9250 | 8450 | 7850 | 7350 | 10100 | 9200 | 8450 | 7900 | 7400 | 7000 |
| 495x65 | 40 | 12000 | 12000 | 11650 | 10900 | 10300 | 9750 | 11400 | 10800 | 10250 | 9750 | 9300 | 8950 |
| | 75 | 12000 | 11350 | 10200 | 9350 | 8650 | 8100 | 10950 | 10050 | 9300 | 8650 | 8150 | 7700 |

Strutting/counter beam supporting underpurlins & hanging beam AS 4055 Classification N1, N2, N3 & N4 [Cont'd]

Ceiling mass - 20 kg/m²

| Effective beam spacing (mm) | | 1800 | | | | | | 3600 | | | | | |
|---------------------------------------|--------------------------------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Roof area supported (m ²) | | 2 | 4 | 6 | 8 | 10 | 12 | 2 | 4 | 6 | 8 | 10 | 12 |
| Member size (GL17C) DxB (mm) | Roof mass (kg/m ²) | Maximum recommended Strutting/Counter beam span (mm) | | | | | | | | | | | |
| 130x85 | 40 | 3700 | 3050 | 2600 | 2200 | 1750 | 1500 | 3250 | 2800 | 2450 | 2150 | 1750 | 1450 |
| | 75 | 3200 | 2450 | 2050 | 1800 | 1500 | 1250 | 2900 | 2350 | 2000 | 1750 | 1450 | 1250 |
| 165x85 | 40 | 4650 | 4050 | 3650 | 3300 | 2800 | 2350 | 4150 | 3750 | 3400 | 3100 | 2750 | 2300 |
| | 75 | 4200 | 3500 | 2950 | 2600 | 2300 | 2000 | 3850 | 3250 | 2800 | 2500 | 2250 | 1950 |
| 195x85 | 40 | 5450 | 4800 | 4350 | 4000 | 3750 | 3300 | 4850 | 4400 | 4100 | 3800 | 3600 | 3200 |
| | 75 | 4950 | 4200 | 3750 | 3350 | 3000 | 2750 | 4550 | 3950 | 3600 | 3200 | 2900 | 2700 |
| 230x85 | 40 | 6400 | 5700 | 5200 | 4800 | 4500 | 4250 | 5650 | 5200 | 4850 | 4550 | 4300 | 4100 |
| | 75 | 5900 | 5000 | 4450 | 4100 | 3800 | 3550 | 5300 | 4700 | 4250 | 3950 | 3700 | 3450 |
| 260x85 | 40 | 7250 | 6500 | 5950 | 5500 | 5150 | 4850 | 6350 | 5850 | 5500 | 5150 | 4900 | 4650 |
| | 75 | 6700 | 5750 | 5100 | 4700 | 4350 | 4100 | 6000 | 5350 | 4850 | 4500 | 4200 | 4000 |
| 295x85 | 40 | 8300 | 7450 | 6850 | 6350 | 5950 | 5650 | 7200 | 6700 | 6250 | 5900 | 5600 | 5350 |
| | 75 | 7700 | 6650 | 5900 | 5400 | 5050 | 4700 | 6850 | 6100 | 5600 | 5200 | 4850 | 4600 |
| 330x85 | 40 | 9300 | 8450 | 7800 | 7250 | 6800 | 6450 | 8050 | 7500 | 7050 | 6700 | 6350 | 6100 |
| | 75 | 8700 | 7550 | 6750 | 6200 | 5750 | 5400 | 7650 | 6900 | 6350 | 5900 | 5500 | 5200 |
| 360x85 | 40 | 10250 | 9350 | 8650 | 8050 | 7550 | 7150 | 8800 | 8250 | 7800 | 7400 | 7050 | 6700 |
| | 75 | 9600 | 8400 | 7550 | 6900 | 6400 | 6000 | 8400 | 7600 | 7000 | 6500 | 6100 | 5750 |
| 395x85 | 40 | 11350 | 10450 | 9650 | 9050 | 8500 | 8050 | 9700 | 9150 | 8650 | 8200 | 7850 | 7500 |
| | 75 | 10700 | 9400 | 8450 | 7750 | 7200 | 6750 | 9300 | 8450 | 7800 | 7250 | 6800 | 6450 |
| 425x85 | 40 | 12000 | 11350 | 10600 | 9900 | 9350 | 8850 | 10500 | 9900 | 9400 | 8950 | 8550 | 8200 |
| | 75 | 11650 | 10300 | 9300 | 8500 | 7900 | 7400 | 10100 | 9200 | 8500 | 7950 | 7450 | 7050 |
| 460x85 | 40 | 12000 | 12000 | 11700 | 11000 | 10350 | 9850 | 11400 | 10850 | 10300 | 9850 | 9400 | 9050 |
| | 75 | 12000 | 11400 | 10300 | 9450 | 8800 | 8200 | 11000 | 10100 | 9400 | 8750 | 8250 | 7800 |
| 495x85 | 40 | 12000 | 12000 | 12000 | 12000 | 11450 | 10850 | 12000 | 11800 | 11250 | 10750 | 10300 | 9900 |
| | 75 | 12000 | 12000 | 11350 | 10450 | 9700 | 9100 | 11950 | 11050 | 10300 | 9600 | 9050 | 8600 |

NOTES:

1. D = member depth, B = member breadth, NS = not suitable
2. Minimum bearing length = 70 mm at end supports
3. The above table was based on a maximum ceiling mass of 20 (kg/m²)
4. Restraint value for slenderness calculations is 1500 mm
5. Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering

Strutting/counter beam supporting underpurlins & hanging beam AS 4055 Classification C1, C2 & C3

Ceiling mass - 20 kg/m²

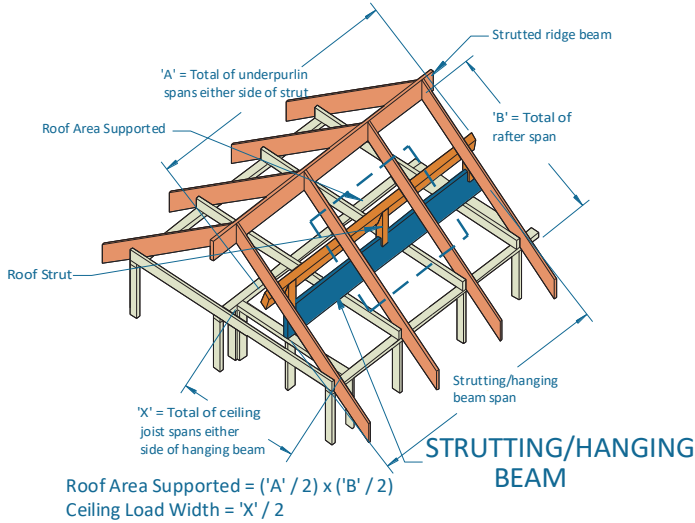
| Effective beam spacing (mm) | | 1800 | | | | | | 3600 | | | | | |
|---------------------------------------|--------------------------------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Roof area supported (m ²) | | 2 | 4 | 6 | 8 | 10 | 12 | 2 | 4 | 6 | 8 | 10 | 12 |
| Member size (GL17C) DxB (mm) | Roof mass (kg/m ²) | Maximum recommended Strutting/Counter beam span (mm) | | | | | | | | | | | |
| 130x65 | 40 | 3350 | 1650 | 1100 | NS | NS | NS | 2950 | 1700 | 1100 | NS | NS | NS |
| | 75 | 2850 | 1650 | 1100 | NS | NS | NS | 2600 | 1600 | 1100 | NS | NS | NS |
| 165x65 | 40 | 4300 | 2700 | 1750 | 1300 | 1050 | NS | 3850 | 2750 | 1800 | 1350 | 1050 | NS |
| | 75 | 3850 | 2600 | 1750 | 1350 | 1050 | NS | 3550 | 2500 | 1750 | 1350 | 1050 | NS |
| 195x65 | 40 | 5050 | 3850 | 2500 | 1850 | 1450 | NS | 4500 | 3750 | 2550 | 1850 | 1500 | NS |
| | 75 | 4550 | 3550 | 2450 | 1850 | 1500 | 1250 | 4150 | 3450 | 2400 | 1850 | 1500 | 1250 |
| 230x65 | 40 | 5900 | 5200 | 3500 | 2600 | 2050 | 1700 | 5200 | 4750 | 3600 | 2600 | 2050 | 1700 |
| | 75 | 5400 | 4600 | 3400 | 2600 | 2100 | 1750 | 4900 | 4300 | 3300 | 2550 | 2050 | 1700 |
| 260x65 | 40 | 6700 | 5950 | 4500 | 3300 | 2650 | 2200 | 5850 | 5400 | 4500 | 3400 | 2650 | 2200 |
| | 75 | 6150 | 5250 | 4250 | 3250 | 2650 | 2200 | 5500 | 4900 | 4150 | 3200 | 2600 | 2200 |
| 295x65 | 40 | 7650 | 6850 | 5900 | 4300 | 3400 | 2800 | 6650 | 6150 | 5650 | 4400 | 3450 | 2850 |
| | 75 | 7050 | 6050 | 5350 | 4150 | 3400 | 2850 | 6300 | 5600 | 5100 | 4050 | 3300 | 2800 |
| 330x65 | 40 | 8600 | 7750 | 7100 | 5450 | 4300 | 3550 | 7400 | 6900 | 6450 | 5500 | 4350 | 3600 |
| | 75 | 8000 | 6850 | 6100 | 5150 | 4200 | 3550 | 7050 | 6300 | 5750 | 5000 | 4100 | 3500 |
| 360x65 | 40 | 9450 | 8550 | 7850 | 6500 | 5150 | 4250 | 8100 | 7550 | 7100 | 6400 | 5250 | 4300 |
| | 75 | 8800 | 7600 | 6800 | 6100 | 4950 | 4200 | 7700 | 6950 | 6350 | 5900 | 4850 | 4100 |
| 395x65 | 40 | 10450 | 9550 | 8800 | 7950 | 6200 | 5100 | 8950 | 8350 | 7900 | 7450 | 6300 | 5200 |
| | 75 | 9800 | 8500 | 7600 | 6950 | 5950 | 5000 | 8500 | 7700 | 7050 | 6550 | 5750 | 4900 |
| 425x65 | 40 | 11350 | 10400 | 9600 | 8950 | 7250 | 5950 | 9650 | 9050 | 8550 | 8100 | 7200 | 6100 |
| | 75 | 10650 | 9350 | 8350 | 7650 | 6800 | 5750 | 9250 | 8400 | 7700 | 7150 | 6600 | 5650 |
| 460x65 | 40 | 12000 | 11450 | 10600 | 9900 | 8600 | 7000 | 10500 | 9900 | 9400 | 8900 | 8300 | 7150 |
| | 75 | 11700 | 10300 | 9250 | 8450 | 7850 | 6700 | 10100 | 9200 | 8450 | 7900 | 7400 | 6500 |
| 495x65 | 40 | 12000 | 12000 | 11650 | 10900 | 9900 | 8200 | 11400 | 10800 | 10250 | 9750 | 9300 | 8150 |
| | 75 | 12000 | 11350 | 10200 | 9350 | 8650 | 7700 | 10950 | 10050 | 9300 | 8650 | 8150 | 7450 |
| 130x85 | 40 | 3700 | 2200 | 1450 | 1050 | NS | NS | 3250 | 2250 | 1450 | 1050 | NS | NS |
| | 75 | 3200 | 2150 | 1450 | 1100 | NS | NS | 2900 | 2050 | 1450 | 1100 | NS | NS |
| 165x85 | 40 | 4650 | 3600 | 2300 | 1750 | 1400 | 1150 | 4150 | 3500 | 2350 | 1750 | 1400 | 1150 |
| | 75 | 4200 | 3350 | 2300 | 1750 | 1400 | 1150 | 3850 | 3250 | 2250 | 1750 | 1400 | 1150 |
| 195x85 | 40 | 5450 | 4800 | 3300 | 2450 | 1950 | 1600 | 4850 | 4400 | 3350 | 2450 | 1950 | 1600 |
| | 75 | 4950 | 4200 | 3200 | 2400 | 1950 | 1650 | 4550 | 3950 | 3100 | 2400 | 1950 | 1600 |
| 230x85 | 40 | 6400 | 5700 | 4600 | 3400 | 2700 | 2250 | 5650 | 5200 | 4600 | 3450 | 2750 | 2250 |
| | 75 | 5900 | 5000 | 4350 | 3350 | 2700 | 2250 | 5300 | 4700 | 4200 | 3250 | 2650 | 2250 |
| 260x85 | 40 | 7250 | 6500 | 5950 | 4400 | 3450 | 2850 | 6350 | 5850 | 5500 | 4500 | 3500 | 2900 |
| | 75 | 6700 | 5750 | 5100 | 4250 | 3450 | 2900 | 6000 | 5350 | 4850 | 4100 | 3350 | 2850 |
| 295x85 | 40 | 8300 | 7450 | 6850 | 5700 | 4500 | 3700 | 7200 | 6700 | 6250 | 5700 | 4600 | 3750 |
| | 75 | 7700 | 6650 | 5900 | 5400 | 4400 | 3700 | 6850 | 6100 | 5600 | 5200 | 4300 | 3650 |
| 330x85 | 40 | 9300 | 8450 | 7800 | 7200 | 5650 | 4650 | 8050 | 7500 | 7050 | 6700 | 5800 | 4750 |
| | 75 | 8700 | 7550 | 6750 | 6200 | 5450 | 4600 | 7650 | 6900 | 6350 | 5900 | 5300 | 4500 |
| 360x85 | 40 | 10250 | 9350 | 8650 | 8050 | 6800 | 5600 | 8800 | 8250 | 7800 | 7400 | 6800 | 5700 |
| | 75 | 9600 | 8400 | 7550 | 6900 | 6400 | 5400 | 8400 | 7600 | 7000 | 6500 | 6100 | 5300 |
| 395x85 | 40 | 11350 | 10450 | 9650 | 9050 | 8250 | 6750 | 9700 | 9150 | 8650 | 8200 | 7850 | 6900 |
| | 75 | 10700 | 9400 | 8450 | 7750 | 7200 | 6450 | 9300 | 8450 | 7800 | 7250 | 6800 | 6300 |
| 425x85 | 40 | 12000 | 11350 | 10600 | 9900 | 9350 | 7900 | 10500 | 9900 | 9400 | 8950 | 8550 | 7900 |
| | 75 | 11650 | 10300 | 9300 | 8500 | 7900 | 7400 | 10100 | 9200 | 8500 | 7950 | 7450 | 7050 |
| 460x85 | 40 | 12000 | 12000 | 11700 | 11000 | 10350 | 9350 | 11400 | 10850 | 10300 | 9850 | 9400 | 9050 |
| | 75 | 12000 | 11400 | 10300 | 9450 | 8800 | 8200 | 11000 | 10100 | 9400 | 8750 | 8250 | 7800 |
| 495x85 | 40 | 12000 | 12000 | 12000 | 12000 | 11450 | 10800 | 12000 | 11800 | 11250 | 10750 | 10300 | 9900 |
| | 75 | 12000 | 12000 | 11350 | 10450 | 9700 | 9100 | 11950 | 11050 | 10300 | 9600 | 9050 | 8600 |

NOTES:

1. D = member depth, B = member breadth, NS = not suitable.
2. Minimum bearing length = 70 mm at end supports
3. The above table was based on a maximum ceiling mass of 20 (kg/m²)
4. Restraint value for slenderness calculations is 1500 mm
5. Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering

Strutting/hanging beam AS 4055 classification N1, N2, N3 & N4

Ceiling mass - 20 kg/m²



EXAMPLE:

wind speed = N3
sheet roof = 40 kg/m²
A = 5000 mm, B = 4200 mm
roof area supported = (A/2) x (B/2)
= (5000/2) x (4200/2)
= 5250000 mm² (convert to m²)
= 5250000/1000000 = 5.25 m²
strutting/hanging beam span = 4200 mm
ceiling joist span ('X') = 4400 mm
ceiling load width = ('X' / 2) = 4400/2 = 2200 mm

Enter column at 3600 mm ceiling load width, 6 m² roof area supported and read down to a span greater than or equal to 4200 mm

ADOPT:

SmartLam GL 17C - 260 x 65

| Ceiling load width (mm) | | 1800 | | | | | | 3600 | | | | | |
|---------------------------------------|--------------------------------|---|-------|-------|-------|------|------|-------|------|------|------|------|------|
| Roof area supported (m ²) | | 2 | 4 | 6 | 8 | 10 | 12 | 2 | 4 | 6 | 8 | 10 | 12 |
| Member size (GL17C) DxB (mm) | Roof mass (kg/m ²) | Maximum recommended Strutting/Hanging beam span (mm0) | | | | | | | | | | | |
| 130x65 | 40 | 3150 | 2600 | 2200 | 1700 | 1350 | 1150 | 2600 | 2300 | 2050 | 1650 | 1350 | 1100 |
| | 75 | 2700 | 2100 | 1750 | 1400 | 1150 | NS | 2400 | 1950 | 1700 | 1350 | 1100 | NS |
| 165x65 | 40 | 4050 | 3600 | 3150 | 2650 | 2150 | 1800 | 3500 | 3100 | 2800 | 2550 | 2100 | 1800 |
| | 75 | 3700 | 3000 | 2550 | 2250 | 1800 | 1500 | 3200 | 2700 | 2350 | 2100 | 1750 | 1500 |
| 195x65 | 40 | 4750 | 4250 | 3850 | 3600 | 3000 | 2500 | 4100 | 3800 | 3500 | 3250 | 2850 | 2450 |
| | 75 | 4400 | 3750 | 3250 | 2850 | 2500 | 2100 | 3850 | 3400 | 3000 | 2700 | 2450 | 2050 |
| 230x65 | 40 | 5600 | 5000 | 4600 | 4250 | 4000 | 3450 | 4750 | 4400 | 4150 | 3950 | 3750 | 3300 |
| | 75 | 5200 | 4450 | 4000 | 3650 | 3350 | 2900 | 4500 | 4050 | 3750 | 3450 | 3150 | 2800 |
| 260x65 | 40 | 6350 | 5700 | 5250 | 4900 | 4600 | 4350 | 5300 | 4950 | 4700 | 4450 | 4250 | 4050 |
| | 75 | 5900 | 5100 | 4550 | 4200 | 3900 | 3700 | 5050 | 4600 | 4250 | 3950 | 3700 | 3500 |
| 295x65 | 40 | 7200 | 6550 | 6000 | 5600 | 5300 | 5000 | 6000 | 5600 | 5300 | 5050 | 4850 | 4650 |
| | 75 | 6700 | 5850 | 5250 | 4800 | 4500 | 4250 | 5750 | 5200 | 4800 | 4500 | 4250 | 4050 |
| 330x65 | 40 | 8100 | 7400 | 6850 | 6350 | 6000 | 5700 | 6650 | 6300 | 6000 | 5700 | 5450 | 5250 |
| | 75 | 7600 | 6650 | 5950 | 5500 | 5100 | 4800 | 6400 | 5850 | 5450 | 5100 | 4800 | 4550 |
| 360x65 | 40 | 8900 | 8150 | 7550 | 7050 | 6650 | 6300 | 7300 | 6900 | 6550 | 6250 | 6000 | 5750 |
| | 75 | 8350 | 7350 | 6600 | 6050 | 5650 | 5300 | 7000 | 6450 | 5950 | 5600 | 5300 | 5050 |
| 395x65 | 40 | 9850 | 9050 | 8400 | 7900 | 7450 | 7050 | 8000 | 7600 | 7250 | 6900 | 6650 | 6400 |
| | 75 | 9300 | 8200 | 7400 | 6800 | 6350 | 5950 | 7700 | 7100 | 6600 | 6200 | 5900 | 5600 |
| 425x65 | 40 | 10700 | 9900 | 9200 | 8650 | 8150 | 7750 | 8650 | 8200 | 7850 | 7500 | 7200 | 6950 |
| | 75 | 10100 | 8950 | 8100 | 7450 | 6950 | 6500 | 8350 | 7700 | 7200 | 6750 | 6400 | 6100 |
| 460x65 | 40 | 11700 | 10850 | 10150 | 9550 | 9000 | 8550 | 9400 | 8950 | 8600 | 8250 | 7900 | 7650 |
| | 75 | 11100 | 9900 | 8950 | 8250 | 7700 | 7200 | 9100 | 8450 | 7900 | 7400 | 7050 | 6700 |
| 495x65 | 40 | 12000 | 11900 | 11150 | 10500 | 9950 | 9450 | 10200 | 9750 | 9350 | 8950 | 8650 | 8350 |
| | 75 | 12000 | 10850 | 9900 | 9100 | 8450 | 7950 | 9850 | 9200 | 8600 | 8100 | 7700 | 7350 |

Strutting/hanging beam AS 4055 Classification N1, N2, N3 & N4 [Cont'd]

Ceiling mass - 20 kg/m²

| Ceiling load width (mm) | | 1800 | | | | | | 3600 | | | | | |
|---------------------------------------|--------------------------------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Roof area supported (m ²) | | 2 | 4 | 6 | 8 | 10 | 12 | 2 | 4 | 6 | 8 | 10 | 12 |
| Member size (GL17C) DxB (mm) | Roof mass (kg/m ²) | Maximum recommended Strutting/Hanging beam span (mm) | | | | | | | | | | | |
| 130x85 | 40 | 3500 | 2900 | 2550 | 2200 | 1750 | 1500 | 2900 | 2550 | 2300 | 2100 | 1700 | 1450 |
| | 75 | 3050 | 2400 | 2000 | 1750 | 1450 | 1250 | 2650 | 2200 | 1900 | 1700 | 1450 | 1200 |
| 165x85 | 40 | 4400 | 3900 | 3550 | 3200 | 2800 | 2350 | 3800 | 3450 | 3150 | 2900 | 2700 | 2300 |
| | 75 | 4050 | 3400 | 2900 | 2550 | 2300 | 1950 | 3600 | 3050 | 2700 | 2400 | 2200 | 1950 |
| 195x85 | 40 | 5150 | 4650 | 4250 | 3950 | 3700 | 3250 | 4400 | 4100 | 3850 | 3650 | 3400 | 3150 |
| | 75 | 4750 | 4100 | 3650 | 3300 | 2950 | 2700 | 4200 | 3750 | 3400 | 3050 | 2800 | 2600 |
| 230x85 | 40 | 6100 | 5500 | 5050 | 4700 | 4400 | 4200 | 5100 | 4800 | 4500 | 4300 | 4100 | 3950 |
| | 75 | 5650 | 4900 | 4400 | 4000 | 3750 | 3500 | 4900 | 4400 | 4100 | 3800 | 3600 | 3350 |
| 260x85 | 40 | 6850 | 6250 | 5750 | 5350 | 5050 | 4800 | 5750 | 5400 | 5100 | 4850 | 4650 | 4450 |
| | 75 | 6400 | 5600 | 5000 | 4600 | 4300 | 4050 | 5500 | 5000 | 4650 | 4350 | 4100 | 3900 |
| 295x85 | 40 | 7800 | 7150 | 6600 | 6150 | 5800 | 5500 | 6500 | 6100 | 5800 | 5550 | 5300 | 5100 |
| | 75 | 7350 | 6400 | 5800 | 5300 | 4950 | 4650 | 6250 | 5700 | 5300 | 4950 | 4700 | 4450 |
| 330x85 | 40 | 8800 | 8100 | 7500 | 7000 | 6650 | 6300 | 7250 | 6850 | 6550 | 6250 | 6000 | 5750 |
| | 75 | 8300 | 7300 | 6600 | 6050 | 5650 | 5300 | 7000 | 6400 | 5950 | 5600 | 5300 | 5050 |
| 360x85 | 40 | 9700 | 8900 | 8300 | 7800 | 7350 | 7000 | 7900 | 7500 | 7150 | 6850 | 6600 | 6350 |
| | 75 | 9150 | 8100 | 7300 | 6750 | 6250 | 5900 | 7650 | 7050 | 6550 | 6150 | 5850 | 5550 |
| 395x85 | 40 | 10700 | 9950 | 9300 | 8700 | 8250 | 7850 | 8700 | 8300 | 7950 | 7600 | 7300 | 7050 |
| | 75 | 10150 | 9050 | 8200 | 7550 | 7050 | 6600 | 8400 | 7800 | 7300 | 6850 | 6500 | 6200 |
| 425x85 | 40 | 11650 | 10850 | 10150 | 9550 | 9050 | 8600 | 9400 | 9000 | 8600 | 8250 | 7950 | 7700 |
| | 75 | 11050 | 9900 | 9000 | 8300 | 7750 | 7250 | 9100 | 8450 | 7950 | 7500 | 7100 | 6750 |
| 460x85 | 40 | 12000 | 11900 | 11200 | 10550 | 10000 | 9550 | 10250 | 9800 | 9450 | 9050 | 8750 | 8450 |
| | 75 | 12000 | 10950 | 9950 | 9200 | 8600 | 8050 | 9950 | 9300 | 8700 | 8200 | 7800 | 7450 |
| 495x85 | 40 | 12000 | 12000 | 12000 | 11600 | 11050 | 10550 | 11100 | 10700 | 10250 | 9900 | 9550 | 9250 |
| | 75 | 12000 | 12000 | 11000 | 10150 | 9500 | 8900 | 10800 | 10100 | 9500 | 9000 | 8550 | 8150 |
| 525x85 | 40 | 12000 | 12000 | 12000 | 12000 | 11950 | 11400 | 11900 | 11450 | 11000 | 10600 | 10250 | 9950 |
| | 75 | 12000 | 12000 | 11900 | 11000 | 10300 | 9700 | 11550 | 10850 | 10250 | 9700 | 9200 | 8800 |
| 560x85 | 40 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 11900 | 11500 | 11150 | 10800 |
| | 75 | 12000 | 12000 | 12000 | 12000 | 11300 | 10600 | 12000 | 11750 | 11100 | 10550 | 10000 | 9600 |
| 590x85 | 40 | 11400 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 11900 | 11550 |
| | 75 | 12000 | 12000 | 12000 | 12000 | 12000 | 11450 | 12000 | 12000 | 11850 | 11250 | 10750 | 10250 |

NOTES:

- D = member depth, B = member breadth, NS = not suitable.
- The above table was based on a maximum ceiling mass of 20 kg/m²
- Minimum bearing length = 70 mm at end supports
- Restraint value for slenderness calculations is 1500 mm
- Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering

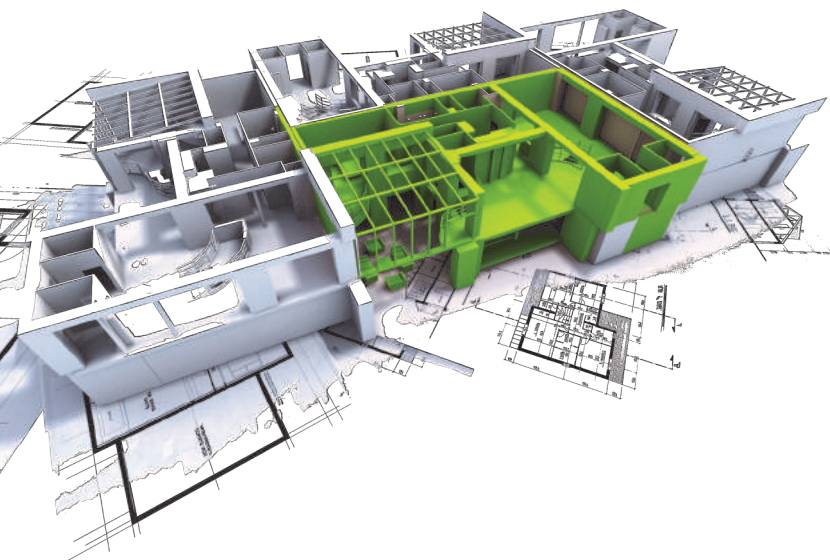
Strutting/hanging beam AS 4055 classification C1, C2 & C3

Ceiling mass - 20 kg/m²

| Ceiling load width (mm) | | 1800 | | | | | | 3600 | | | | | |
|---------------------------------------|--------------------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Roof area supported (m ²) | | 2 | 4 | 6 | 8 | 10 | 12 | 2 | 4 | 6 | 8 | 10 | 12 |
| Member size (GL17C) DxB (mm) | Roof mass (kg/m ²) | Maximum recommended Strutting/Hanging beam span (mm0) | | | | | | | | | | | |
| 130x65 | 40 | 3150 | 1650 | 1100 | NS | NS | NS | 2600 | 1700 | 1100 | NS | NS | NS |
| | 75 | 2700 | 1650 | 1100 | NS | NS | NS | 2400 | 1600 | 1100 | NS | NS | NS |
| 165x65 | 40 | 4050 | 2700 | 1750 | 1300 | NS | NS | 3500 | 2700 | 1800 | 1350 | NS | NS |
| | 75 | 3700 | 2600 | 1750 | 1350 | 1050 | NS | 3200 | 2500 | 1750 | 1300 | 1050 | NS |
| 195x65 | 40 | 4750 | 3850 | 2500 | 1850 | 1450 | NS | 4100 | 3650 | 2550 | 1900 | 1500 | NS |
| | 75 | 4400 | 3550 | 2450 | 1850 | 1500 | 1250 | 3850 | 3350 | 2400 | 1850 | 1500 | 1250 |
| 230x65 | 40 | 5600 | 5000 | 3500 | 2600 | 2050 | 1700 | 4750 | 4400 | 3550 | 2650 | 2100 | 1700 |
| | 75 | 5200 | 4450 | 3350 | 2550 | 2050 | 1750 | 4500 | 4050 | 3250 | 2500 | 2050 | 1700 |
| 260x65 | 40 | 6350 | 5700 | 4500 | 3350 | 2650 | 2200 | 5300 | 4950 | 4400 | 3400 | 2700 | 2200 |
| | 75 | 5900 | 5100 | 4250 | 3250 | 2650 | 2200 | 5050 | 4600 | 4050 | 3150 | 2600 | 2200 |
| 295x65 | 40 | 7200 | 6550 | 5900 | 4300 | 3400 | 2850 | 6000 | 5600 | 5300 | 4400 | 3500 | 2850 |
| | 75 | 6700 | 5850 | 5250 | 4150 | 3350 | 2850 | 5750 | 5200 | 4800 | 4000 | 3300 | 2800 |
| 330x65 | 40 | 8100 | 7400 | 6850 | 5450 | 4300 | 3550 | 6650 | 6300 | 6000 | 5400 | 4400 | 3600 |
| | 75 | 7600 | 6650 | 5950 | 5150 | 4200 | 3550 | 6400 | 5850 | 5450 | 4950 | 4050 | 3450 |
| 360x65 | 40 | 8900 | 8150 | 7550 | 6550 | 5150 | 4250 | 7300 | 6900 | 6550 | 6250 | 5250 | 4350 |
| | 75 | 8350 | 7350 | 6600 | 6050 | 4950 | 4200 | 7000 | 6450 | 5950 | 5600 | 4800 | 4050 |
| 395x65 | 40 | 9850 | 9050 | 8400 | 7900 | 6250 | 5150 | 8000 | 7600 | 7250 | 6900 | 6200 | 5300 |
| | 75 | 9300 | 8200 | 7400 | 6800 | 5900 | 5000 | 7700 | 7100 | 6600 | 6200 | 5700 | 4850 |
| 425x65 | 40 | 10700 | 9900 | 9200 | 8650 | 7250 | 5950 | 8650 | 8200 | 7850 | 7500 | 7100 | 6100 |
| | 75 | 10100 | 8950 | 8100 | 7450 | 6800 | 5750 | 8350 | 7700 | 7200 | 6750 | 6400 | 5550 |
| 460x65 | 40 | 11700 | 10850 | 10150 | 9550 | 8600 | 7050 | 9400 | 8950 | 8600 | 8250 | 7900 | 7050 |
| | 75 | 11100 | 9900 | 8950 | 8250 | 7700 | 6700 | 9100 | 8450 | 7900 | 7400 | 7050 | 6450 |
| 495x65 | 40 | 12000 | 11900 | 11150 | 10500 | 9900 | 8200 | 10200 | 9750 | 9350 | 8950 | 8650 | 8050 |
| | 75 | 12000 | 10850 | 9900 | 9100 | 8450 | 7700 | 9850 | 9200 | 8600 | 8100 | 7700 | 7350 |
| 130x85 | 40 | 3500 | 2200 | 1450 | 1050 | NS | NS | 2900 | 2250 | 1450 | 1100 | NS | NS |
| | 75 | 3050 | 2100 | 1450 | 1100 | NS | NS | 2650 | 2050 | 1400 | 1050 | NS | NS |
| 165x85 | 40 | 4400 | 3600 | 2350 | 1750 | 1400 | 1150 | 3800 | 3450 | 2400 | 1750 | 1400 | 1150 |
| | 75 | 4050 | 3350 | 2300 | 1750 | 1400 | 1150 | 3600 | 3050 | 2250 | 1700 | 1400 | 1150 |
| 195x85 | 40 | 5150 | 4650 | 3300 | 2450 | 1950 | 1600 | 4400 | 4100 | 3350 | 2500 | 1950 | 1600 |
| | 75 | 4750 | 4100 | 3150 | 2400 | 1950 | 1650 | 4200 | 3750 | 3050 | 2350 | 1900 | 1600 |
| 230x85 | 40 | 6100 | 5500 | 4650 | 3400 | 2700 | 2250 | 5100 | 4800 | 4500 | 3500 | 2750 | 2250 |
| | 75 | 5650 | 4900 | 4350 | 3350 | 2700 | 2250 | 4900 | 4400 | 4100 | 3250 | 2650 | 2250 |
| 260x85 | 40 | 6850 | 6250 | 5750 | 4400 | 3450 | 2850 | 5750 | 5400 | 5100 | 4450 | 3550 | 2900 |
| | 75 | 6400 | 5600 | 5000 | 4200 | 3400 | 2900 | 5500 | 5000 | 4650 | 4050 | 3350 | 2800 |
| 295x85 | 40 | 7800 | 7150 | 6600 | 5700 | 4500 | 3700 | 6500 | 6100 | 5800 | 5550 | 4650 | 3800 |
| | 75 | 7350 | 6400 | 5800 | 5300 | 4350 | 3700 | 6250 | 5700 | 5300 | 4950 | 4250 | 3600 |
| 330x85 | 40 | 8800 | 8100 | 7500 | 7000 | 5700 | 4700 | 7250 | 6850 | 6550 | 6250 | 5700 | 4800 |
| | 75 | 8300 | 7300 | 6600 | 6050 | 5400 | 4550 | 7000 | 6400 | 5950 | 5600 | 5200 | 4450 |
| 360x85 | 40 | 9700 | 8900 | 8300 | 7800 | 6800 | 5600 | 7900 | 7500 | 7150 | 6850 | 6600 | 5750 |
| | 75 | 9150 | 8100 | 7300 | 6750 | 6250 | 5400 | 7650 | 7050 | 6550 | 6150 | 5850 | 5250 |
| 395x85 | 40 | 10700 | 9950 | 9300 | 8700 | 8250 | 6800 | 8700 | 8300 | 7950 | 7600 | 7300 | 6800 |
| | 75 | 10150 | 9050 | 8200 | 7550 | 7050 | 6450 | 8400 | 7800 | 7300 | 6850 | 6500 | 6200 |
| 425x85 | 40 | 11650 | 10850 | 10150 | 9550 | 9050 | 7900 | 9400 | 9000 | 8600 | 8250 | 7950 | 7700 |
| | 75 | 11050 | 9900 | 9000 | 8300 | 7750 | 7250 | 9100 | 8450 | 7950 | 7500 | 7100 | 6750 |
| 460x85 | 40 | 12000 | 11900 | 11200 | 10550 | 10000 | 9350 | 10250 | 9800 | 9450 | 9050 | 8750 | 8450 |
| | 75 | 12000 | 10950 | 9950 | 9200 | 8600 | 8050 | 9950 | 9300 | 8700 | 8200 | 7800 | 7450 |
| 495x85 | 40 | 12000 | 12000 | 12000 | 11600 | 11050 | 10550 | 11100 | 10700 | 10250 | 9900 | 9550 | 9250 |
| | 75 | 12000 | 12000 | 11000 | 10150 | 9500 | 8900 | 10800 | 10100 | 9500 | 9000 | 8550 | 8150 |
| 525x85 | 40 | 12000 | 12000 | 12000 | 12000 | 11950 | 11400 | 11900 | 11450 | 11000 | 10600 | 10250 | 9950 |
| | 75 | 12000 | 12000 | 11900 | 11000 | 10300 | 9700 | 11550 | 10850 | 10250 | 9700 | 9200 | 8800 |
| 560x85 | 40 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 11900 | 11500 | 11150 | 10800 |
| | 75 | 12000 | 12000 | 12000 | 12000 | 11300 | 10600 | 12000 | 11750 | 11100 | 10550 | 10000 | 9600 |
| 590x85 | 40 | 11400 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 12000 | 11900 | 11550 |
| | 75 | 12000 | 12000 | 12000 | 12000 | 12000 | 11450 | 12000 | 12000 | 11850 | 11250 | 10750 | 10250 |

NOTES:

- D = member depth, B = member breadth, NS = not suitable.
- The above table was based on a maximum ceiling mass of 20 kg/m²
- Minimum bearing length = 70 mm at end supports
- Restraint value for slenderness calculations is 1500 mm
- Not all sizes of SmartLam GL 17C in this table are stocked in each state. Please check with your supplier before ordering



SMARTFRAME Design Compendium

| Design Compendium Contents | Interactive | Printable | PC |
|----------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Specifications software | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Technical Support | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> |
| Design Guides (PDF) | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Technical Illustrations | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Fixing Details | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Software Tutorial | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> |

Never before has so much user-friendly computer power you been unleashed into the hands of building industry professionals to allow the design and detailing of engineered timber products. This software, in conjunction with the SmartFrame Design Centre and SmartFrame Engineered Wood products themselves, combines to form the most sophisticated structural timber option ever available to the Australian market.

The Smart Frame Engineered Timber Solution represents an entirely new and revolutionary concept in the delivery of the 21st century technology and service to the building industry.

Available from:

Head Office Victoria

31-45 Orchard Street,
Kilsyth Vic 3137

email: sales@tilling.com.au

Phone +61 3 9725 0222

Fax +61 3 9725 3045

New South Wales

109 Kurrajong Avenue,
Mt Druitt, NSW 2770

email: nswsales@tilling.com.au

Phone +61 2 9677 2600

Fax +61 2 9677 2500

Queensland

84 Magnesium Drive,
Crestmead QLD 4132

email: qldsales@tilling.com.au

Phone +61 7 3440 5400

Fax +61 7 3440 5444

Western Australia

10 Cartwright Drive
Forrestdale WA 6112

email: wasaes@tilling.com.au

Phone +61 8 9399 1609

Fax +61 8 9399 1065

South Australia

5-9 Woomera Ave
Edinburgh SA 5111

email: sasales@tilling.com.au

Phone +61 8 8345 1966

Fax +61 8 8345 1977

Sales 1800 33 77 03

Technical support 1300 668 690

