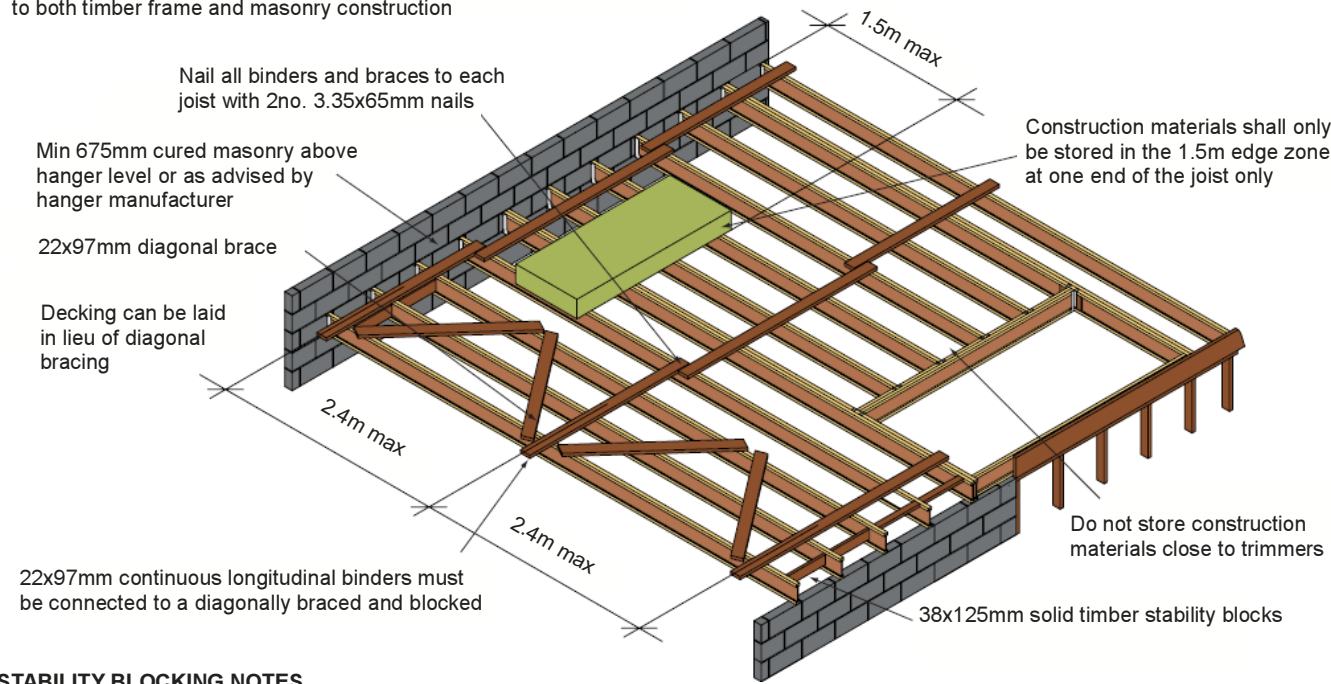


INSTALLATION GUIDELINES

This diagram indicates temporary erection bracing only. It is applicable to both timber frame and masonry construction



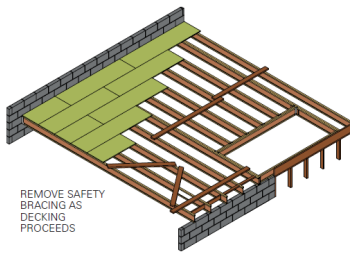
STABILITY BLOCKING NOTES

- Use timber blocks or JJJ-Joist blocking pieces
- Timber blocks to be minimum 38x125mm cut squarely and accurately to maintain joist spacing. Fasten with minimum 2 no. 3.35x65mm nails
- Stability blocks need to be fixed to 3 joists and cover a minimum distance of 1200mm
- Timber blocks in the diagonally braced systems are required in each run of joists and at cantilever supports
- When joists butt on an interior support, block both sets of joists
- Additional braced and blocked systems should be provided at 12m spacing in long joist runs

TEMPORARY ERECTION BRACING NOTES

The builder is responsible for identifying and minimising the risks involved in erecting JJJ-Joists to ensure that the health and safety of all workers is maintained. Builders should be aware of the health and safety responsibilities imposed on them by the Construction (Design and Management) Regulations 2007. Proper erection procedures and bracing are vital to the safe construction of JJJ-Joists floors. The following notes may assist builders in preparing a safety assessment.

1. Do not allow workers to walk on unbraced joists
2. Do not store building materials on unbraced joists
3. JJJ-Joists should be erected straight and vertical. The maximum deviation from horizontal should not exceed 10mm and the maximum deviation from the vertical should not exceed 2mm
4. JJJ-Joists are unstable until fully braced. Bracing includes: longitudinal binders, diagonal bracing, stability blocking, rim joist/rim boards
5. All longitudinal binders, diagonal braces, stability blocks, and hangers should be completely installed and fully nailed as detailed
6. Lateral strength should be provided by a diagonally braced and blocked system across at least 3 joists as shown in the Erection Bracing Details (diagram above). Additional braced and blocking systems should be provided at 12m spacing in long joist runs
7. Once a JJJ-Joist floor has been fully braced, construction materials may be placed on the floor provided that the overall weight of material to be placed on a single joist does not exceed 250kg (200kg for 195mm deep joists). To ensure that the weight is distributed in a safe manner we recommend that timber bearers (perpendicular to joist run) or a standard pallet (1200x1200) are placed under the construction materials. Bearers must extend over at least 2 joists.
8. Flooring should be fully fixed to the JJJ-Joists before additional loads are placed on the floor
9. The ends of cantilevers should be stabilised with longitudinal binders fixed to the top and bottom flanges



ATTENTION! THE FOLLOWING CONDITIONS ARE NOT ALLOWED

DO NOT HAMMER ON THE WEB OR FLANGE

DO NOT BEVEL CUT THE JOISTS PAST THE INSIDE FACE OF THE WALL

DO NOT SUPPORT THE JOIST ON THE WEB

DO NOT WALK ON JOISTS UNTIL PROPER BRACING IS IN PLACE

DO NOT CUT HOLES TOO CLOSE TO EACH OTHER - SEE HOLE INSTALLATION GUIDE

DO NOT SPLIT THE FLANGE, ENSURE PROPER TOE NAILING

DO NOT OVER-CUT WEB HOLES

DO NOT USE NON-APPROVED HANGERS

DO NOT STACK BUILDING MATERIALS ON UNBRACED JOISTS

DO NOT CUT OR NOTCH FLANGES

JJI-Joists Site Storage

Protect JJJ-Joists from the elements. Keep them dry.

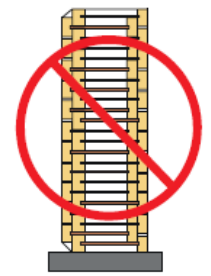
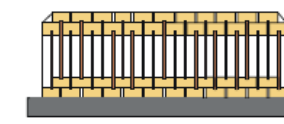


Use suitable lifting equipment to offload JJJ-Joist bundles



Transport JJJ-Joists on edge, not flat

Store JJJ-Joists on edge

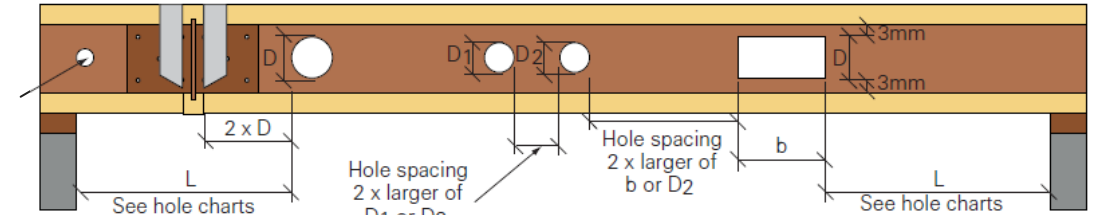


Service Holes in JJJ-Joists

Joist Depth (mm)	Joist Span (mm)	Hole Size (mm)													
		50		75		100		125		150		175		200	
		○+□	□	○+□	□	○+□	□	○+□	□	○+□	□	○+□	□	○+□	□
145	2000	300	300												
	2500	387	300												
	3000	637	528												
	3500	887	778												
	4000	1137	1028												
195	3000	300	300	300	300	300	401								
	3500	300	300	300	366	374	651								
	4000	300	405	527	616	624	901								
	4500	477	655	777	866	874	1151								
	5000	727	905	1027	1116	1124	1401								
220	3500	300	300	300	383	422	493	493	745						
	4000	300	300	453	633	672	743	743	995						
	4500	305	528	703	883	922	993	993	1245						
	5000	555	778	953	1133	1172	1243	1243	1495						
	5500	805	1028	1203	1383	1422	1493	1493	1745						
235	3500	300	300	300	341	395	528	528	792						
	4000	300	300	370	591	645	778	778	1042						
	4500	300	421	620	841	895	1028	1028	1292						
	5000	430	671	870	1091	1145	1278	1278	1542						
	5500	680	921	1120	1341	1395	1528	1528	1792						
245	3500	300	300	300	300	361	530	530	819	585	819				
	4000	300	300	303	548	611	780	780	1069	835	1069				
	4500	300	341	553	798	861	1030	1030	1319	1085	1319				
	5000	339	591	803	1048	1111	1280	1280	1569	1335	1569				
	5500	589	841	1053	1298	1361	1530	1530	1819	1585	1819				
300	4000	300	300	300	300	300	586	586	845	805	965	932	1187	981	1187
	4500	300	300	300	416	514	836	836	1095	1055	1215	1182	1437	1231	1437
	5000	300	300	331	666	764	1086	1086	1345	1305	1465	1432	1687	1481	1687
	5500	300	321	581	916	1014	1336	1336	1595	1555	1715	1682	1937	1731	1937
	6000	300	571	831	1166	1264	1586	1586	1845	1805	1965	1932	2187	1981	2187

1. ○ = Circular Holes, □ = Square Holes and ▭ = Rectangular Holes
2. Where more than one hole is to be cut, the minimum spacing between holes must be 2 times the width of the largest hole
3. The rectangular hole width b should not exceed 1.5 x times the height D
4. Cut all holes carefully. Do not over-cut and do not cut the flanges
5. Where holes are required in the rim and header joists of timber frame construction refer to James Jones & Sons Ltd
6. Plastic plumbing is ideal for use with JJJ-Joists. Where copper plumbing is to be used, careful consideration of the sequence of pipe installation will be required

A 35mm hole (18mm for 145 deep joist) may be drilled anywhere on the centre line of the web material provided there is a minimum of 35mm (18mm) from the edge of the hole to the end of the joist and it is not directly over a support



Metalwork Suppliers



Cullen Building Products
1 Wheatstone Place, Southfield Industrial Estate
Glenrothes, Fife, KY6 2SW
Tel: 01592 771132 Fax: 01592 771182



Simpson Strong-Tie
Winchester Road, Cardinal Point
Tamworth, Staffordshire, B78 3HG
Tel: 01827 255600 Fax: 01827255616



James Jones & Sons Limited
TIMBER SYSTEMS DIVISION

James Jones & Sons Ltd. Timber Systems Division
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