

Specification Guide

1.0 GENERAL MASTER PLANK® is a laminate construction of spruce veneers procured from forests managed and certified under the Finnish Forest Certification System audited by BVQI (Bureau Veritas Quality International) according to the ISO14001 environmental standard and the ISO 9002 quality standard. It is composed of various qualities of veneer arranged to obtain optimum utilization of each veneer to develop maximum strength and reliability. All veneers are oriented with the grain parallel to the long dimension of the billet, and is commonly referred to as **Laminated Veneer Lumber (LVL)**.

2.0 INTENDED USE This product is intended to be used as beams, joists, lintels or rafters under dry conditions of use, and for scaffold plank, staging, bleacher seats, cross arms, ladder rails and other industrial applications.

3.0 DIMENSIONS AND COMPOSITION

Nominal Thickness (inches)	3/4	1-1/8	1-1/4	1-1/2	1-5/8	1-3/4	2	2-1/2	3	3-1/2
Nominal Thickness (mm)	19	28	33	39	42	45	51	63	75	88
Widths	3-5/8" to 24"									
Lengths	8' to 60'									
Number Plies	6	9	11	13	14	15	17	21	25	30
Thickness of Plies	3.0 mm									

MATERIAL

4.0 Veneer Plies Face, back and inner plies are all of the same species and meet Pan European Forest Certification requirements.

4.1 Species Norway Spruce (*Picea abies*)

4.2 Grade The grade shall not be below Grade C, per American Product Standard PS 1.

4.3 Thickness The thickness of each veneer shall be nominal 3.0mm (0.110").

CONSTRUCTION

5.0 Glue Bond Requirements The glue shall meet or exceed American Product Standard PS 1-Exterior Type.

6.0 Grain Direction All veneers shall be oriented with the grain parallel to the long dimension of the billet.

7.0 Veneer Joints All individual veneer joints shall be scarfed and staggered, with a distance between joints of not less than 4" (10.16 cm).

8.0 Tolerances

Thickness	all	± 5/64" (2.0 mm)
Width	< 8" (200 mm)	± 1/16" (1.5 mm)
	8" (200 mm) -24" (600 mm)	± 1/8" (3.0 mm)
Length	> 24" 600 mm	± 0.5 %
	all	± 5/16" (8.0 mm)

MANUFACTURE

9.0 Finished Product

9.1 Widths Widths shall be cut within tolerances given, and with square clean edges, for each order.

9.2 Lengths Lengths shall be cut within tolerances given, and with square clean edges, for each order.

9.3 Surface Surface may be sanded or unsanded as required by order.

9.4 Surface Surface (face) veneer may be grade A (clear) if requested.

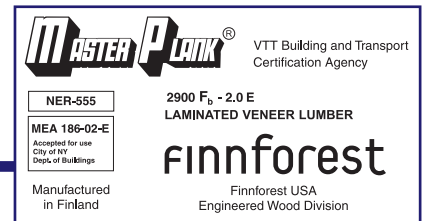
9.5 Surface To enhance dimensional stability, seal coating can be provided upon request.

QUALITY CONTROL

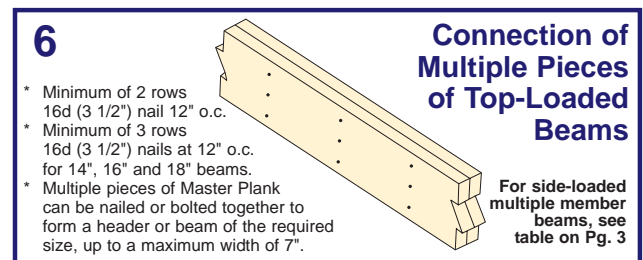
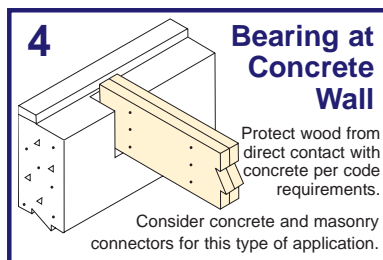
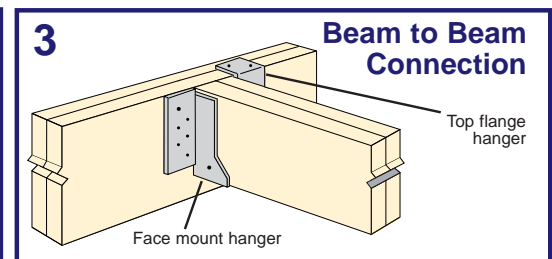
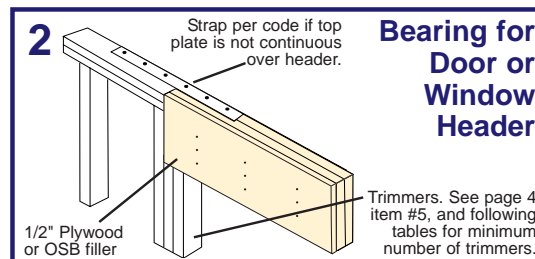
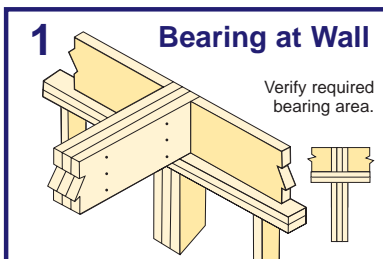
10.0 MASTER PLANK is manufactured under the ISO 9001 quality certification system. Quality control shall be under the supervision of the Technical Research Centre of Finland, Helsinki, Finland.

IDENTIFICATION

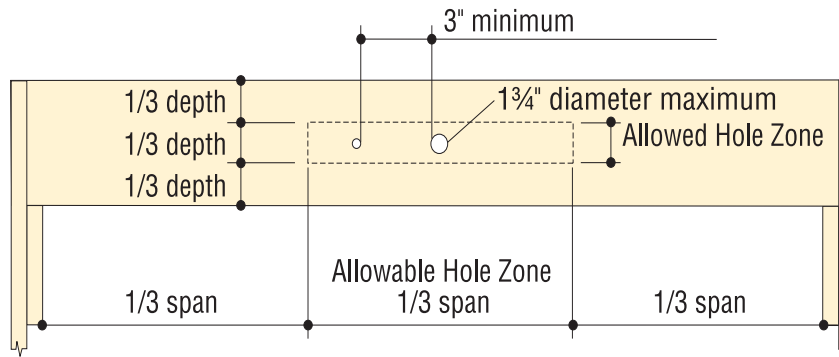
11.0 MASTER PLANK



Bearing Information



Allowable Holes for Uniformly Loaded Beams

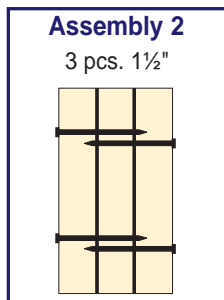
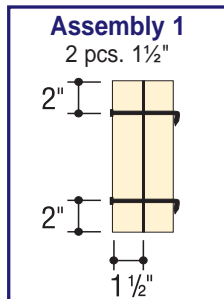


Cutting, notching or drilling holes are NOT allowed, except as noted.

General Notes:

1. This hole chart is for typical beam applications only, and covers uniform loads and span conditions provided in this brochure.
2. **NO** square holes are allowed.
3. For other hole configurations, contact your design professional or supplier for assistance.

Multiple Member Connections for Side-Loaded Beams



Multiple Assembly (See diagram)	MAXIMUM UNIFORM LOAD APPLIED TO EITHER OUTSIDE MEMBER (LBS. PER LINEAL FT.)			
	Nailed Connection ⁽¹⁾		Through Bolted Connection ⁽²⁾	
	2 rows 16d (3 1/2") Common Wire @ 12" o.c.	3 rows 16d (3 1/2") Common Wire @ 12" o.c.	2 rows 1/2" BOLTS @ 24" o.c.	2 rows 1/2" BOLTS @ 12" o.c.
1	202	303	380	760
2 ⁽³⁾	202	303	380	760

1. Specific gravity for nail and bolt design is 0.44.
2. For 6 inches on center, nailed connections are 404 plf and 606 plf respectively and for 4 inches on center are 606 plf and 909 plf. For assembly, 2 nails need to be placed through each beam face as specified, through and clinched.
3. Bolt design assumes a worst case mode I single or double shear failure. Nail design assumes a worst case mode III failure. All nail and bolting requirements use the 2001 NDS[®]

4. For 4-ply and greater beams see a design professional for the bolting and loading requirements.
5. The beam must be sized to carry the applied load, then the connection checked for adequacy.