



Engineered Wood Products

CONSTRUCTION DETAILS NORDIC LAM







ABOUT NORDIC

NORDIC STRUCTURES

Nordic Structures is the leading innovator in engineered wood products. Its resource comes from responsibly managed lands within the regional boreal forest. Vertical integration, from forest to structure, bolstered by Nordic's experienced design and development team, ensures consistent quality and unparalleled level of service.

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GENERAL NOTES

1.0 General

- 1.1 This document supersedes all previous versions. For the latest version, consult <u>nordic.ca</u> or contact Nordic Structures.
- 1.2 While this guide emphasizes residential construction, much of the basic design information can be used for other construction applications. Review by a design professional is required for applications beyond the scope of this document.
- 1.3 Refer to the <u>Nordic Lam Technical Guide (NS-GT4)</u> for selection and sizing tables, or to the floor or roof layout provided by your distributor.
- 1.4 For more information, consult <u>nordic.ca</u> or contact Nordic Structures.

2.0 Fire Resistance

- 2.1 Nordic Lam beams with fire-resistance ratings are special orders. Contact Nordic Structures for more information.
- 2.2 In some designs, sprinkler systems are used with Nordic Lam beams. There are a variety of sprinkler attachments that incorporate fasteners permitted by the National Fire Protection Association (NFPA), design load assumptions published by the NFPA, and published design fastener capacities. These sprinkler attachments are illustrated in details 6.



LIST OF DETAILS

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Floor Framing Details

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Header, Wall and Column Framing Details

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Conventional (Stick) Roof	8b	5.2





LAM

NORDIC LAM GLUED-LAMINATED TIMBER

Nordic Lam glued-laminated timber of industrial appearance classification consists of small wood laminations bonded together in parallel using structural adhesives.

Check availability of products with your local distributor.

NORDIC STRUCTURES

nordic.ca



BEAMS AND HEADERS

Widths 1-3/4, 3-1/2, 5-1/2 and 7 in. Depths 9-1/2, 11-7/8, 14, 16, 18, 20, 22 and 24 in. Lengths*

Up to 48 ft Stress grade

24F-1.9E

COLUMNS

Widths

3-1/2, 5-1/2 and 7 in.

Depths

3-1/2, 5-1/2 and 7 in. Lengths*

Up to 48 ft

Stress grade

ES12



STUDS

Widths 1-1/2 and 1-3/4 in.

Depths 5-1/2 and 7-1/4 in.

Lengths* Up to 48 ft

Stress grade ES11

* Larger sizes available upon request



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NORDIC



FLOOR FRAMING DETAILS





- Provide adequate bearing length and bearing across the full width to support Nordic Lam beam. Refer to the Nordic Lam Technical Guide (NS-GT4) for bearing length requirements, and consult local building code for specific requirements.
- 2. Heavy concentrated loads such as heating/cooling units, crane rails or main framing members suspended from the bottom of beams induce tension perpendicular to grain and may cause splitting. Except for light loads such as hung ceilings (including 2x-framing), sprinkler systems, lighting appliances, etc., always suspend concentrated loads from the beam top, unless designed otherwise by a qualified engineer.

NORDIC		TITLE Beam Bearing at End Wall - Steel Post Cap	DRAWING 1a			
STRUCTURES		CATEGORY	SCALE	DATE	PAGE	
nordic.ca	NORDIC LAM	Floor Framing Details	-	2021-08-01	1.1	



- Provide adequate bearing length and bearing across the full width to support Nordic Lam beam. Refer to the Nordic Lam Technical Guide (NS-GT4) for bearing length requirements, and consult local building code for specific requirements.
- 2. Heavy concentrated loads such as heating/cooling units, crane rails or main framing members suspended from the bottom of beams induce tension perpendicular to grain and may cause splitting. Except for light loads such as hung ceilings (including 2x-framing), sprinkler systems, lighting appliances, etc., always suspend concentrated loads from the beam top, unless designed otherwise by a qualified engineer.

NORDIC		TITLE Beam Bearing at End Wall - Steel Tie Plate		drawing 1b	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Floor Framing Details	-	2021-08-01	1.2



- Provide adequate bearing length and bearing across the full width to support Nordic Lam beam. Refer to the Nordic Lam Technical Guide (NS-GT4) for bearing length requirements, and consult local building code for specific requirements.
- 2. Heavy concentrated loads such as heating/cooling units, crane rails or main framing members suspended from the bottom of beams induce tension perpendicular to grain and may cause splitting. Except for light loads such as hung ceilings (including 2x-framing), sprinkler systems, lighting appliances, etc., always suspend concentrated loads from the beam top, unless designed otherwise by a qualified engineer.

NORDIC		TITLE Beam Bearing at End Wall - King Post		DRAWING 1c	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Floor Framing Details	-	2021-08-01	1.3



- Provide adequate bearing length and bearing across the full width to support Nordic Lam beam. Refer to the Nordic Lam Technical Guide (NS-GT4) for bearing length requirements, and consult local building code for specific requirements.
- 2. Heavy concentrated loads such as heating/cooling units, crane rails or main framing members suspended from the bottom of beams induce tension perpendicular to grain and may cause splitting. Except for light loads such as hung ceilings (including 2x-framing), sprinkler systems, lighting appliances, etc., always suspend concentrated loads from the beam top, unless designed otherwise by a qualified engineer.

NORDIC		TITLE Beam Bearing at End Wall - Masonry Wall	earing at End Wall - Masonry Wall 1d		
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Floor Framing Details	-	2021-08-01	1.4



Section Through Floor Joists

Section Through Nordic Lam Beam

- Provide adequate bearing length and bearing across the full width to support Nordic Lam beam. Refer to the Nordic Lam Technical Guide (NS-GT4) for bearing length requirements, and consult local building code for specific requirements.
- 2. Heavy concentrated loads such as heating/cooling units, crane rails or main framing members suspended from the bottom of beams induce tension perpendicular to grain and may cause splitting. Except for light loads such as hung ceilings (including 2x-framing), sprinkler systems, lighting appliances, etc., always suspend concentrated loads from the beam top, unless designed otherwise by a qualified engineer.

		TITLE Beam Bearing at End Wall with Floor Joists Over Beam		drawing 1e		
STRUCTURES	NS-DC4	CATEGORY	SCALE	DATE	– – PAGE	
nordic.ca	NORDIC LAM	Floor Framing Details	-	2021-08-01	1.5	



- Provide adequate bearing length and bearing across the full width to support Nordic Lam beam. Refer to the Nordic Lam Technical Guide (NS-GT4) for bearing length requirements, and consult local building code for specific requirements.
- 2. Heavy concentrated loads such as heating/cooling units, crane rails or main framing members suspended from the bottom of beams induce tension perpendicular to grain and may cause splitting. Except for light loads such as hung ceilings (including 2x-framing), sprinkler systems, lighting appliances, etc., always suspend concentrated loads from the beam top, unless designed otherwise by a qualified engineer.

NORDIC		TITLE Beam Bearing at End Wall with Floor Joists Flush with Beam		drawing 1f	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Floor Framing Details	-	2021-08-01	1.6



- 1. Blocking required between joists at bearing for lateral support, not shown for clarity.
- 2. Provide adequate bearing length and bearing across the full width to support Nordic Lam beam. Refer to the Nordic Lam Technical Guide (NS-GT4) for bearing length requirements, and consult local building code for specific requirements.
- 3. Heavy concentrated loads such as heating/cooling units, crane rails or main framing members suspended from the bottom of beams induce tension perpendicular to grain and may cause splitting. Except for light loads such as hung ceilings (including 2x-framing), sprinkler systems, lighting appliances, etc., always suspend concentrated loads from the beam top, unless designed otherwise by a qualified engineer.

NORDIC		TITLE Lumber Joists Bearing on Floor Beam		drawing 1g	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca NORDIC LAM	Floor Framing Details	-	2021-08-01	1.7	



- 1. Blocking required between joists at bearing for lateral support, not shown for clarity.
- 2. Provide adequate bearing length and bearing across the full width to support Nordic Lam beam. Refer to the Nordic Lam Technical Guide (NS-GT4) for bearing length requirements, and consult local building code for specific requirements.
- 3. Heavy concentrated loads such as heating/cooling units, crane rails or main framing members suspended from the bottom of beams induce tension perpendicular to grain and may cause splitting. Except for light loads such as hung ceilings (including 2x-framing), sprinkler systems, lighting appliances, etc., always suspend concentrated loads from the beam top, unless designed otherwise by a qualified engineer.

NORDIC		TITLE Nordic I-joists Bearing on Floor Beam		drawing 1h		
STRUCTURES		CATEGORY	SCALE	DATE	PAGE	
nordic.ca NordicLAM	Floor Framing Details	-	2021-08-01	1.8		

1j



Notes:

- 1. Hangers installed per manufacturer's recommendations.
- 2. Provide adequate bearing length and bearing across the full width to support Nordic Lam beam. Refer to the Nordic Lam Technical Guide (NS-GT4) for bearing length requirements, and consult local building code for specific requirements.
- 3. Heavy concentrated loads such as heating/cooling units, crane rails or main framing members suspended from the bottom of beams induce tension perpendicular to grain and may cause splitting. Except for light loads such as hung ceilings (including 2x-framing), sprinkler systems, lighting appliances, etc., always suspend concentrated loads from the beam top, unless designed otherwise by a qualified engineer.

NORDIC		Joists Mounted Flush with Floor Beam		drawing 1j	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Floor Framing Details	-	2021-08-01	1.9

1k



- 1. See detail 1m for similar details with continuous floor beam over intermediate wood supports.
- Provide adequate bearing length and bearing across the full width to support Nordic Lam beam. Refer to the Nordic Lam Technical Guide (NS-GT4) for bearing length requirements, and consult local building code for specific requirements.
- 3. Heavy concentrated loads such as heating/cooling units, crane rails or main framing members suspended from the bottom of beams induce tension perpendicular to grain and may cause splitting. Except for light loads such as hung ceilings (including 2x-framing), sprinkler systems, lighting appliances, etc., always suspend concentrated loads from the beam top, unless designed otherwise by a qualified engineer.

NORDIC		TITLE Beams Butting Over Intermediate Wood Support		drawing 1k	
STRUCTURES NS-DC4		CATEGORY	SCALE	DATE	PAGE
nordic.ca Nordic LAM	Floor Framing Details	-	2021-08-01	1.10	



- Provide adequate bearing length and bearing across the full width to support Nordic Lam beam. Refer to the Nordic Lam Technical Guide (NS-GT4) for bearing length requirements, and consult local building code for specific requirements.
- Heavy concentrated loads such as heating/cooling units, crane rails or main framing members suspended from the bottom of beams induce tension perpendicular to grain and may cause splitting. Except for light loads such as hung ceilings (including 2x-framing), sprinkler systems, lighting appliances, etc., always suspend concentrated loads from the beam top, unless designed otherwise by a qualified engineer.

NORDIC		TITLE Continuous Floor Beam Over Intermediate Wood Support		drawing 1m	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca Nordic LAM	Floor Framing Details	-	2021-08-01	1.11	

1n



Notes:

- 1. Provide adequate bearing length and bearing across the full width to support Nordic Lam beam. Refer to the Nordic Lam Technical Guide (NS-GT4) for bearing length requirements, and consult local building code for specific requirements.
- 2. Heavy concentrated loads such as heating/cooling units, crane rails or main framing members suspended from the bottom of beams induce tension perpendicular to grain and may cause splitting. Except for light loads such as hung ceilings (including 2x-framing), sprinkler systems, lighting appliances, etc., always suspend concentrated loads from the beam top, unless designed otherwise by a qualified engineer.

NORDIC	NS-DC4	TITLE Beam Sitting in Concrete or Masonry Wall Pocket		drawing 1n	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca NordicLAM	Floor Framing Details	-	2021-08-01	1.12	





- Provide adequate bearing length and bearing across the full width to support Nordic Lam beam. Refer to the Nordic Lam Technical Guide (NS-GT4) for bearing length requirements, and consult local building code for specific requirements.
- 2. Heavy concentrated loads such as heating/cooling units, crane rails or main framing members suspended from the bottom of beams induce tension perpendicular to grain and may cause splitting. Except for light loads such as hung ceilings (including 2x-framing), sprinkler systems, lighting appliances, etc., always suspend concentrated loads from the beam top, unless designed otherwise by a qualified engineer.

NORDIC		TITLE Continuous Floor Beam Over Intermediate Steel Support		drawing 1p	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca Nordic LAM	Floor Framing Details	-	2021-08-01	1.13	



- 1. Provide adequate bearing length and bearing across the full width to support Nordic Lam beam. Refer to the Nordic Lam Technical Guide (NS-GT4) for bearing length requirements, and consult local building code for specific requirements.
- 2. Heavy concentrated loads such as heating/cooling units, crane rails or main framing members suspended from the bottom of beams induce tension perpendicular to grain and may cause splitting. Except for light loads such as hung ceilings (including 2x-framing), sprinkler systems, lighting appliances, etc., always suspend concentrated loads from the beam top, unless designed otherwise by a qualified engineer.

NORDIC		TITLE Beam End Bearing on Steel Support		drawing 1q	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Floor Framing Details	-	2021-08-01	1.14

NORDIC



HEADER, WALL AND COLUMN FRAMING DETAILS

2





2a

- 1. Provide adequate bearing length and bearing across the full width to support Nordic Lam beam. Refer to the Nordic Lam Technical Guide (NS-GT4) for bearing length requirements, and consult local building code for specific requirements.
- 2. Heavy concentrated loads such as heating/cooling units, crane rails or main framing members suspended from the bottom of beams induce tension perpendicular to grain and may cause splitting. Except for light loads such as hung ceilings (including 2x-framing), sprinkler systems, lighting appliances, etc., always suspend concentrated loads from the beam top, unless designed otherwise by a qualified engineer.

		TITLE Garage Door Header to End Wall - Steel Tie Plate		drawing 2a	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca NordicLAM	Header Framing Details	-	2021-08-01	2.1	



- Provide adequate bearing length and bearing across the full width to support Nordic Lam beam. Refer to the Nordic Lam Technical Guide (NS-GT4) for bearing length requirements, and consult local building code for specific requirements.
- 2. Heavy concentrated loads such as heating/cooling units, crane rails or main framing members suspended from the bottom of beams induce tension perpendicular to grain and may cause splitting. Except for light loads such as hung ceilings (including 2x-framing), sprinkler systems, lighting appliances, etc., always suspend concentrated loads from the beam top, unless designed otherwise by a qualified engineer.

NORDIC		TITLE Garage Door Header to End Wall - King Stud		drawing 2b	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Header Framing Details	-	2021-08-01	2.2



2c

- Provide adequate bearing length and bearing across the full width to support Nordic Lam beam. Refer to the Nordic Lam Technical Guide (NS-GT4) for bearing length requirements, and consult local building code for specific requirements.
- 2. Heavy concentrated loads such as heating/cooling units, crane rails or main framing members suspended from the bottom of beams induce tension perpendicular to grain and may cause splitting. Except for light loads such as hung ceilings (including 2x-framing), sprinkler systems, lighting appliances, etc., always suspend concentrated loads from the beam top, unless designed otherwise by a qualified engineer.

NORDIC		TITLE Garage Door Header to End Wall - Column and King Stud		drawing 2c	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Header Framing Details	-	2021-08-01	2.3



2d

- Provide adequate bearing length and bearing across the full width to support Nordic Lam beam. Refer to the Nordic Lam Technical Guide (NS-GT4) for bearing length requirements, and consult local building code for specific requirements.
- Heavy concentrated loads such as heating/cooling units, crane rails or main framing members suspended from the bottom of beams induce tension perpendicular to grain and may cause splitting. Except for light loads such as hung ceilings (including 2x-framing), sprinkler systems, lighting appliances, etc., always suspend concentrated loads from the beam top, unless designed otherwise by a qualified engineer.

NORDIC		TITLE Garage Door Header Over Intermediate Support		drawing 2d	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Header Framing Details	-	2021-08-01	2.4



- Provide adequate bearing length and bearing across the full width to support Nordic Lam beam. Refer to the Nordic Lam Technical Guide (NS-GT4) for bearing length requirements, and consult local building code for specific requirements.
- 2. Heavy concentrated loads such as heating/cooling units, crane rails or main framing members suspended from the bottom of beams induce tension perpendicular to grain and may cause splitting. Except for light loads such as hung ceilings (including 2x-framing), sprinkler systems, lighting appliances, etc., always suspend concentrated loads from the beam top, unless designed otherwise by a qualified engineer.

NORDIC		Garage Door Header Over Intermediate Steel Support		drawing 2e	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Header Framing Details	-	2021-08-01	2.5



_



1. Plate width must equal wall thickness to provide lateral bracing. (Plate not required if header width equals the wall thickness.)

NORDIC		TITLE Header to Column		drawing 3a	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Typical Wall and Column Framing Details	-	2021-08-01	2.7

3b



		TITLE Column to Bottom Plate		drawing 3b	
STRUCTURES	NS-DC4	CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Typical Wall and Column Framing Details	-	2021-08-01	2.8





NORDIC		TITLE Column to Top Plate		drawing 3c	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Typical Wall and Column Framing Details	-	2021-08-01	2.9



		πιτε Bearing for Door or Window Header		DRAWING 3d	
٠	NS-DC4 DETAILS Nordic Lam	CATEGORY Typical Wall and Column Framing Details	SCALE	DATE 2021-08-01	PAGE 2.10

NORDIC STRUCTURES

nordic.ca

3d



		TITLE Bearing at Wall		drawing 3e		
STRUCTURES	NS-DC4	CATEGORY	SCALE	DATE	PAGE	
nordic.ca	NORDIC LAM	Typical Wall and Column Framing Details	-	2021-08-01	2.11	

3e



NORDIC		TITLE Beam to Frame		drawing 3f	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Typical Wall and Column Framing Details	-	2021-08-01	2.12

3f

g



		TITLE Column Base		drawing 3g	
STRUCTURES	NS-DC4	CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Typical Wall and Column Framing Details	-	2021-08-01	2.13

3h



		TITLE Elevated Column Base		drawing 3h	
STRUCTURES	NS-DC4	CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Typical Wall and Column Framing Details	-	2021-08-01	2.14

3j



Note:

1. Wall bracing is necessary if double top plate is not attached directly to the roof/floor diaphragm.

NORDIC		TITLE Wind Brace		drawing 3 j	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Typical Wall and Column Framing Details	-	2021-08-01	2.15



1. Connection of double top plate to outlooker must be designed to transfer lateral load to roof.

NORDIC		TITLE Roof Outlooker		drawing 3k	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Typical Wall and Column Framing Details	-	2021-08-01	2.16



1. Unless hanger sides laterally support the top flange, bearing stiffeners shall be used.

2. Ledger depth shall match the height of the joists.



Ledger Resistance

Depth (in.)	Number of 3-1/2" nails per stud	Stud spacing (in.)	Resistance (plf)
	3	12	585
9-1/2	3	16	780
	3	24	1,170
	4	12	780
11-7/8	4	16	1,040
	4	24	1,560
	5	12	975
14	5	16	1,300
	5	24	1,950
	6	12	1,170
16	6	16	1,560
	6	24	2,340

Notes:

1. The ledger resistance represents the ledger-to-stud connection resistance in pounds per linear foot (plf). To convert the joist reaction to a uniform load (in plf), divide the joist reaction (in lbf) by the joist spacing (in ft).

2. Studs shall be grade S-P-F No. 3/Stud or better.

3. Minimum distances for nails: spacing of 2-5/8 inches; and edge distance of 3/4 inch.

		TITLE Framing Anchor to a Ledger		drawing 3m-1		-
STRUCTURES	NS-DC4	CATEGORY	SCALE	DATE	PAGE	—
nordic.ca	NORDIC LAM	Typical Wall and Column Framing Details	-	2022-05-01	2.17	

NORDIC





HOLES IN BEAMS AND STUDS



Beam Hole Specifications

Horizontal Holes

Horizontal holes in glued laminated timbers are limited in size and location to maintain the structural integrity of the beam. Detail 4 shows the zones of a uniformly loaded, simply supported beam where the field drilling of holes may be considered. These non-critical zones are located in portions of the beam stressed to less than 50 percent of specified bending strength and less than 50 percent of specified shear strength. For beams, of more complex loading or other than simple spans, similar diagrams may be developed.

Field-drilled horizontal holes should be used 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 or designer of record.

These field drilled horizontal holes should meet the following guidelines:

- 1. **Hole size:** The hole diameter should not exceed 1-1/2 inch or 1/10 the beam depth, whichever is smaller.
- 2. **Hole location:** The hole should have a minimum clear distance, as measured from the edge of the hole to the nearest edge of the beam, of four hole diameters to the top or bottom face of the beam and eight hole diameters from the end of the beam. Note that the horizontal hole should not be drilled in the moment-critical zone, as defined in detail 4, unless approved by an engineer or architect qualified in engineered timber design.
- 3. **Hole spacing:** The minimum clear spacing between adjacent holes, as measured between the nearest edge of the holes, should be eight hole diameters based on the largest diameter of any adjacent hole in the beam.
- 4. **Number of holes:** The maximum number of holes should not exceed one hole per five feet of beam length. The hole spacing limitation, as given above, should be satisfied separately.

For glulam members that have been oversized or for glulam joists, the guidelines given above may be relaxed based on an engineering analysis. Regardless of the hole location, holes drilled horizontally through a member should be positioned and sized with the understanding that the beam will deflect over a period of time under in-service loading conditions. This deflection could cause distress to supported equipment or piping unless properly considered.

NORDIC		TITLE Beam Hole Specifications		DRAWING -	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Holes in Beams and Studs	-	2021-08-01	3.1



Zones where horizontal holes are permitted for passage of wires, conduit, etc.

Note:

1. This detail represents the zones where small horizontal holes are permitted holes in a uniformly loaded, simply supported beam.

NORDIC		TITLE Maximum Holes in Beams		drawing 4	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Holes in Beams and Studs	-	2021-08-01	3.2





- One notch may be cut anywhere except the middle 1/3 of the length of the stud or column.
 Bored holes shall not be located in the same section as a cut or notch in stud.





NORDIC	-DC4 ••	TITLE Maximum Holes in Studs		drawing 5	
STRUCTURES NS-DL4		CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Holes in Beams and Studs	-	2021-08-01	3.3

NORDIC



SPRINKLER PIPE AND MECHANICAL UNIT INSTALLATION







NORDIC		TITLE Ceiling Flange Hanger		drawing 6a	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Sprinkler Pipe Installation for Beams	-	2021-08-01	4.1





NORDIC		TITLE Beam Clamp Hanger		drawing 6b	
STRUCTURES	NS-DC4	CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Sprinkler Pipe Installation for Beams	-	2021-08-01	4.2

6c





Two sheet metal screws #10 x 1-1/2" Option: Two clinched 0.113" x 2-1/2" nails

NORDIC		TITLE Angle Bracket Hanger		drawing 6c	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Sprinkler Pipe Installation for Beams	-	2021-08-01	4.3

Option 1

Install per NFPA 13. CPVC sprinkler system pipe 2-1/2" maximum diameter = 290 lb maximum point load (145 lb per beam)

Install per NFPA 13. Steel sprinkler system pipe 4", maximum diameter = 500 lb maximum point load (250 lb per beam)

Option 2



One 1/4" x 3" lag screw One #

One #14 x 3" sheet metal screw

NORDIC		TITLE NFPA 13 Steel Angle Trapeze with Hanger		drawing 6d	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca NordicLam	Sprinkler Pipe Installation for Beams	-	2021-08-01	4.4	











		TITLE CPVC Hanger - Double Offset		DRAWING		
STRUCTURES	NS-DC4	CATEGORY	SCALE	 DATE	PAGE	-
nordic.ca Nordic LAM	Sprinkler Pipe Installation for Beams	-	2021-08-01	4.5		





Four sheet metal screws #10 x 1-1/2" Option: Four clinched 0.113" x 2-1/2" nails

		TITLE CPVC Hanger - Surface Mount		DRAWING	
STRUCTURES	NS-DC4	CATEGORY	SCALE	 DATE	PAGE
nordic.ca	NORDIC LAM	Sprinkler Pipe Installation for Beams	-	2021-08-01	4.6



Option 1 - Connector type DTT2Z



Option 2 - Connector type RWH





NORDIC		Mechanical Unit 7		drawing 7a	
STRUCTURES	NS-DC4	CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Mechanical Unit Installation for Beams	-	2021-08-01	4.7

NORDIC



ROOF FRAMING DETAILS

NORDIC STRUCTURES 5



NORDIC		TITLE Truss Roof		drawing 8a	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Roof Framing Details	-	2021-08-01	5.1



NORDIC		TITLE Conventional (Stick) Roof		DRAWING 8b	
STRUCTURES		CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC LAM	Roof Framing Details	-	2021-08-01	5.2