

Weaver Development

Project:

Address: Gaston II (181035B) Date: 12/4/2020

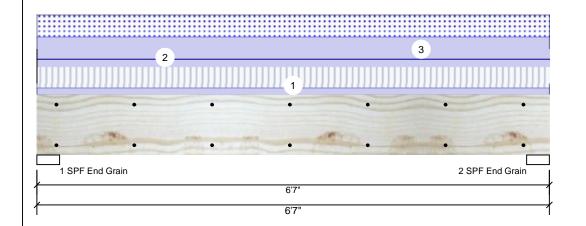
Input by: Christine Shivy Job Name: 6/0 Sliding Door HDR

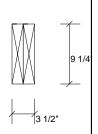
Project #:

6/0 Sliding Door HDR **Kerto-S LVL** 1.750" X 9.250"

Level: Level 2-Ply - PASSED

Decetions LINIDATTEDNIED Ib (Liniift)





D+0.75(L+S)

Page 1 of 1

Member Inform	ation
Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	360
Importance:	Normal
Temperature:	Temp <= 100°F

Application: Floor Design Method: ASD **Building Code: IBC/IRC 2015** Load Sharing: No Deck: Not Checked

Reaction	JIIS UINPAT	I EKINED IK	(Upilit)			
Brg	Live	Dead	Snow	Wind	Const	
1	1060	1903	1113	0	0	
2	1060	1903	1113	0	0	
		Brg Live 1 1060	Brg Live Dead 1 1060 1903	1 1060 1903 1113	Brg Live Dead Snow Wind 1 1060 1903 1113 0	Brg Live Dead Snow Wind Const 1 1060 1903 1113 0 0

Analysis Results Analysis Actual Comb. Case Location Allowed Capacity 0.349 (35%) D+0.75(L+S) L Moment 5033 ft-lb 3'3 1/2" 14423 ft-lb Unbraced 5033 ft-lb 3'3 1/2" 10451 ft-lb 0.482 (48%) D+0.75(L+S) L 2459 lb 1' 7943 lb 0.310 (31%) D+0.75(L+S) L Shear LL Defl inch 0.042 (L/1741) 3'3 1/2" 0.153 (L/480) 0.280 (28%) 0.75(L+S) TL Defl inch 0.092 (L/803) 3'3 1/2" 0.204 (L/360) 0.450 (45%) D+0.75(L+S) L

Bearings Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1903 / 1629 1 - SPF 3.500" 3533 L D+0.75(L+S)

Grain 1903 / 1629 2 - SPF 3.500" 3533 L End

Design Notes

- 1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top braced at bearings.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on single ply width

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ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments	Ī
1	Uniform			Тор	108 PLF	322 PLF	0 PLF	0 PLF	0 PLF	F4	
2	Uniform			Тор	125 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Load	
3	Uniform			Тор	338 PLF	0 PLF	338 PLF	0 PLF	0 PLF	A4	
	Self Weight				7 PLF						

Notes

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- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
- Damaged Beams must not be used
- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation
- 6. For flat roofs provide proper drainage to prevent ponding

End

Grain

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Manufacturer Info

Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS



This design is valid until 2/26/2023



Address:

Project:

Weaver Homes

Date: 12/4/2020

Input by: Christine Shivy

Level: Level

Reactions UNPATTERNED Ib (Uplift)

Live

Dead

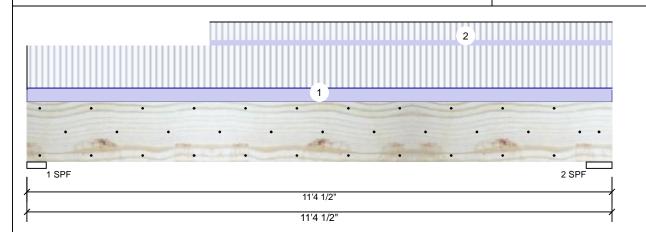
Job Name: Project #:

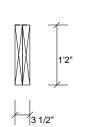
Kerto-S LVL FB1

1.750" X 14.000"

Gaston II (181035B)

2-Ply - PASSED





Const

Page 1 of 1

Member Information								
Type:	Girder							
Plies:	2							
Moisture Condition:	Dry							
Deflection LL:	480							
Deflection TL:	360							
Importance:	Normal							
Temperature:	Temp <= 100°F							

Application: Floor Design Method: ASD **Building Code:** IBC 2012 Load Sharing: No Deck: Not Checked

2129 771 0 0 0 1 2523 904 0 0 0 2

Snow

Wind

Bearings

Brg

Bearing	Length	Cap. R	eact D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	4.500"	43%	771 / 2129	2899	L	D+L
2 - SPF	6.000"	38%	904 / 2523	3426	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	8168 ft-lb	5'9 3/16"	26999 ft-lb	0.303 (30%)	D+L	L
Unbraced	8168 ft-lb	5'9 3/16"	10258 ft-lb	0.796 (80%)	D+L	L
Shear	2941 lb	9'9 1/4"	10453 lb	0.281 (28%)	D+L	L
LL Defl inch	0.090 (L/1419)	5'8 3/16"	0.266 (L/480)	0.340 (34%)	L	L
TL Defl inch	0.122 (L/1044)	5'8 3/16"	0.354 (L/360)	0.340 (34%)	D+L	L

Design Notes

- 1 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top braced at bearings.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on single ply width.

		- 3 - 1 7								
ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Far Face	106 PLF	318 PLF	0 PLF	0 PLF	0 PLF	F5
2	Part. Uniform	3-6-8 to 11-4-8		Тор	44 PLF	132 PLF	0 PLF	0 PLF	0 PLF	F9
	Self Weight				11 PLF					

Notes

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- Handling & Installation
- Indiang & Installation

 LVL beams must not be cut or drilled

 Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

 Damaged Beams must not be used

 Design assumes top edge is laterally restrained

 Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

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Manufacturer Info



Weaver Homes

Project:

Address: Gaston II (181035B) Date: 12/4/2020

Input by: Marshall Naylor

Level: Level

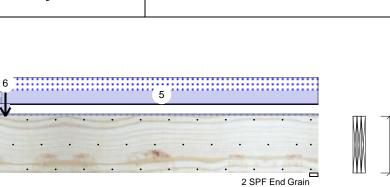
Job Name: BM1 Project #:

Kerto-S LVL FB2

1.750" X 24.000"

3

3-Ply - PASSED



1 SPF End Grain 22'6 22'6'

Floor

ASD

Yes

IBC 2012

Not Checked

Page 1 of 1

Member Information

4

Туре: Girder Plies: 3 Moisture Condition: Dry Deflection LL: 480 Deflection TL: 360 Importance: Normal

Temperature: Temp <= 100°F

Reactions UNPATTERNED Ib (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	225	6536	5095	0	0
2	225	4429	3676	0	0

Bearings

End Grain

Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. D+S 1 - SPF 3.500" 6536 / 5095 11631 L End Grain 2 - SPF 3.500" 4429 / 3676 8104 L D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	65477 ft-lb	11'5 3/4"	131295 ft-lb	0.499 (50%)	D+S	L
Unbraced	65477 ft-lb	11'5 3/4"	65903 ft-lb	0.994 (99%)	D+S	L
Shear	10093 lb	2'2 5/8"	30912 lb	0.327 (33%)	D+S	L
LL Defl inch	0.226 (L/1171)	11'1 11/16"	0.552 (L/480)	0.410 (41%)	S	L
TL Defl inch	0.501 (L/528)	11' 7/8"	0.735 (L/360)	0.680 (68%)	D+S	L

Application:

Design Method:

Building Code:

Load Sharing:

Deck:

Design Notes

- 1 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 3'11 5/8" o.c.

	6 Bollom bracet	at bearings.		ı							
7 Lateral slenderness ratio based on single ply width.											
	ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	
	1	Tie-In	0-0-0 to 22-6-0	0-6-0	Far Face	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
	0	Dort Uniform	0.0.0+0.11.7.0		Ton	120 DLE	∩ DI E	0 DLE	0 DI E	0 DLE	

1	Tie-In	0-0-0 to 22-6-0 0-6-0	Far Face	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	1' Floor
2	Part. Uniform	0-0-0 to 11-7-8	Тор	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
3	Part. Uniform	0-0-0 to 11-4-0	Near Face	79 PLF	0 PLF	79 PLF	0 PLF	0 PLF	M2
4	Part. Uniform	0-0-0 to 11-0-0	Тор	341 PLF	0 PLF	341 PLF	0 PLF	0 PLF	A2
5	Part. Uniform	11-4-0 to 22-6-0	Near Face	164 PLF	0 PLF	164 PLF	0 PLF	0 PLF	M3
6	Point	11-5-12	Тор	2293 lb	0 lb	2293 lb	0 lb	0 lb	B2
	Self Weight			28 PLF					

Notes

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- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- LVL beams must not be cut or drilled
 Refer to manufacturer's product information
 regarding installation requirements, multi-ply
 fastening details, beam strength values, and code
 approvals
- Damaged Beams must not be used
- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation
- 6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

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Comments



This design is valid until 2/26/2023



Weaver Homes

Project:

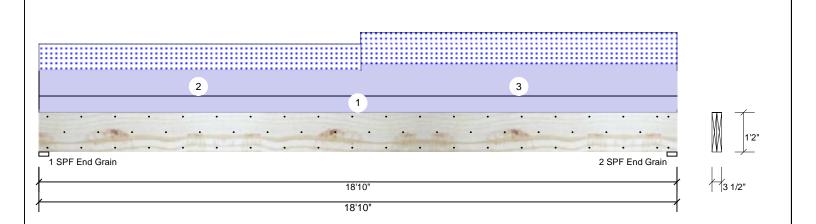
Address: Gaston II (181035B) Date: 12/4/2020

Input by: Christine Shivy Job Name: Front GDH

Page 1 of 1

Project #:

Kerto-S LVL 1.750" X 14.000" Front GDH 2-Ply - PASSED Level: Level



Member Inforn	nation			Reactio	ns UNPAT	TERNED I	(Uplift)
Type:	Girder	Application:	Floor	Brg	Live	Dead	Snow
Plies:	2	Design Method:	ASD	1	0	1619	951
Moisture Condition	: Dry	Building Code:	IBC 2012	2	0	1720	1053
Deflection LL:	480	Load Sharing:	No				
Deflection TL:	360	Deck:	Not Checked				
Importance:	Normal						
Temperature:	Temp <= 100°F						
				Bearing	gs		
				Bearing	Length	Cap. Rea	ct D/L lb
				1 - SPF	3.500"	24% 16	619 / 951

Bearings												
Bearing	Length	Cap. F	React D/L lb	Total	Ld. Case	Ld. Comb.						
1 - SPF End Grain	3.500"	24%	1619 / 951	2570	L	D+S						
2 - SPF End Grain	3.500"	26%	1720 / 1053	2773	L	D+S						

Wind

0

0

Const

0

0

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	11981 ft-lb	9'8 7/8"	31049 ft-lb	0.386 (39%)	D+S	L
Unbraced	11981 ft-lb	9'8 7/8"	12012 ft-lb	0.997 (100%)	D+S	L
Shear	2347 lb	17'5 1/4"	12021 lb	0.195 (20%)	D+S	L
LL Defl inch	0.181 (L/1218)	9'6 3/16"	0.459 (L/480)	0.390 (39%)	S	L
TL Defl inch	0.483 (L/457)	9'5 13/16"	0.612 (L/360)	0.790 (79%)	D+S	L

Design Notes

- 1 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 8'9" o.c.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on single ply width.

· = and · an											
ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments	
1	Uniform			Тор	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall	
2	Part. Uniform	0-0-0 to 9-6-0		Тор	96 PLF	0 PLF	96 PLF	0 PLF	0 PLF	M2	
3	Part. Uniform	9-6-0 to 18-10-0		Тор	117 PLF	0 PLF	117 PLF	0 PLF	0 PLF	M3	
	Self Weight				11 PLF						

Notes

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 LVL not to be treated with fire retardant or corrosive

Handling & Installation

Indicating & Installation

I. VIL beams must not be cut or drilled

Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

Damaged Beams must not be used

Design assumes top edge is laterally restrained

Design assumes top edge is laterally restrained of the production of th

6. For flat roofs provide proper drainage to prevent ponding

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Manufacturer Info



Weaver Development

Project:

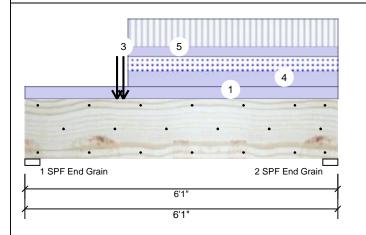
Address: Gaston II (181035B) Date: 12/4/2020

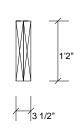
Input by: Christine Shivy Job Name: Window Hdr.

Project #:

Kerto-S LVL Window Hdr. 1.750" X 14.000" 2-Ply - PASSED

Level: Level





Page 1 of 1

Member Information									
Type:	Girder								
Plies:	2								
Moisture Condition:	Dry								
Deflection LL:	480								
Deflection TL:	360								
Importance:	Normal								
Temperature:	Temp <= 100°F								

Application: Design Method: ASD **Building Code: IBC/IRC 2015** Load Sharing: No Deck: Not Checked

Reactions UNPATTERNED Ib (Uplift) Brg Dead Wind Const Live Snow 2560 3110 1843 0 0 1 1638 2098 1137 0 0 2

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	10167 ft-lb	1'11"	31049 ft-lb	0.327 (33%)	D+0.75(L+S)	L
Unbraced	10167 ft-lb	1'11"	17799 ft-lb	0.571 (57%)	D+0.75(L+S)	L
Shear	5480 lb	1'4 3/4"	10453 lb	0.524 (52%)	D+L	L
LL Defl inch	0.027 (L/2482)	2'5 1/4"	0.141 (L/480)	0.190 (19%)	0.75(L+S)	L
TL Defl inch	0.053 (L/1280)	2'5 11/16"	0.188 (L/360)	0.280 (28%)	D+0.75(L+S)	L

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- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on single ply width.

Bearings						
Bearing Len	igth Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.	
1 - SPF 3.50 End Grain	00" 60%	3110 / 3302	6412	L	D+0.75(L+S)	
2 - SPF 3.50	00" 39%	2098 / 2082	4179	L	D+0.75(L+S)	

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Тор	125 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
2	Point	1-9-8		Тор	1005 lb	3014 lb	0 lb	0 lb	0 lb	F8
3	Point	1-11-0		Тор	2335 lb	0 lb	2335 lb	0 lb	0 lb	C3
4	Part. Uniform	2-0-0 to 6-1-0		Тор	158 PLF	0 PLF	158 PLF	0 PLF	0 PLF	C2
5	Part. Uniform	2-0-0 to 6-1-0		Тор	97 PLF	290 PLF	0 PLF	0 PLF	0 PLF	F7
	Self Weight				11 PLF					

End Grain

Notes

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