Client:

Project:

Address:

Weaver Development

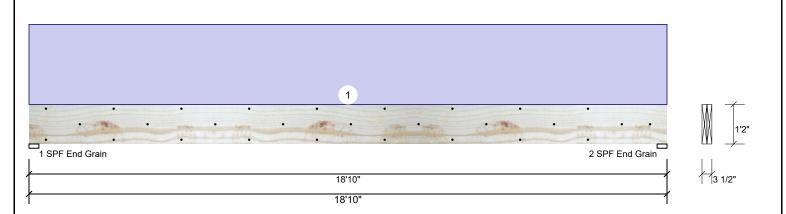
5/7/2021

Input by: Curtis Quick Job Name: The Lauren H Beams Page 1 of 12

Project #:

Kerto-S LVL 2-Ply - PASSED 1.750" X 14.000" **GDH**

Level: Level



Member Information								Reactions UNPATTERNED Ib (Uplift)						
Type:	Girder		Applicat	ion: Fl	oor		Brg	Live	Dead	Snow	١	Wind	Const	
Plies:	2		Design I	Method: AS	SD		1	0	2457	0		0	0	
Moisture Condition	: Dry		Building	Code: IB	C 2012		2	0	2457	0		0	0	
Deflection LL:	360		Load Sh	aring: No)									
Deflection TL:	240		Deck:	No	ot Checked									
Importance:	Normal													
Temperature:	Temp <= 10	0°F												
							Bearing	S						
							Bearing	Length	Cap. F	React D/L lb	Total	Ld. Case	Ld. Comb.	
							1 - SPF	3.500"	23%	2457 / 0	2457	Uniform	D	
							End							
Analysis Result	s						Grain							
Analysis Ac	tual	Location	Allowed	Capacity	Comb.	Case	2 - SPF	3.500"	23%	2457 / 0	2457	Uniform	D	
Moment 110)11 ft-lb	9'5"	24299 ft-lb	0.453 (45%)) D	Uniform	End Grain							
Unbraced 110)11 ft-lb	9'5"	11013 ft-lb	1.000	D	Uniform								

Uniform

Uniform

Design Notes

Shear

1 Fasten all plies using 3 rows of SDW22338 at 24" o.c. Maximum end distance not to exceed 12".

1'4 3/4" 9408 lb

(100%)

0 999.000 (L/0) 0.000 (0%)

9'5 1/16" 0.919 (L/240) 0.480 (48%) D

0.222 (22%) D

- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Simpson fasteners applied from a single side of the member use tip values where published.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at a maximum of 9'7 1/2" o.c.
- 7 Bottom braced at bearings.

2093 lb

LL Defl inch 0.000 (L/999)

TL Defl inch 0.444 (L/497)

8 Lateral slenderness ratio based on single ply width.

		p.,								
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	250 PLF	0 PLF	0 PLF	0 PLF	0 PLF	
	Self Weight				11 PLF					

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- 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

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This design is valid until 2/26/2023

Manufacturer Info

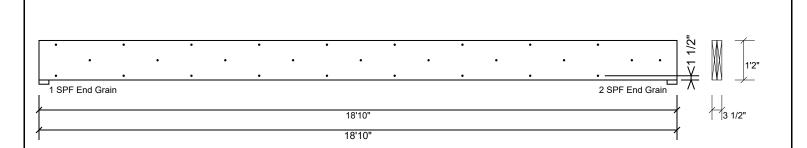
Client: Weaver Development

Project: Address: Date: 5/7/2021 Input by:

Curtis Quick Job Name: The Lauren H Beams Page 2 of 12

Project #:

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



Multi-Ply Analysis

Fasten all plies using 3 rows of SDW22338 at 24" o.c., Maximum end distance not to exceed 12"

1 3		
Capacity	0.0 %	
Load	0.0 PLF	
Yield Limit per Foot	382.5 PLF	
Yield Limit per Fastener	255.0 lb.	
Yield Mode	Lookup	
Edge Distance	1 1/2"	
Min. End Distance	6"	
Load Combination		
Duration Factor	1.00	

Notes

NOtes
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- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

- Handling & Installation

 1. UVI beams must not be cut or drilled

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

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

 5. 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

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Client: Project: Address: Weaver Development

Date: 5/7/2021

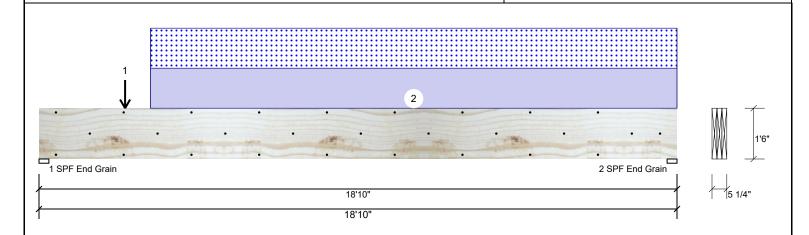
Input by: Curtis Quick Job Name: The Lauren H Beams Page 3 of 12

Project #:

Kerto-S LVL GDH (Side Load)

1.750" X 18.000"

3-Ply - PASSED Level: Level



Member Inforn	nation			Reaction	ns UNPAT	TTERNED lb (Upli	ft)	
Type:	Girder	Application:	Floor	Brg	Live	Dead Sno	w Wind	Const
Plies:	3	Design Method:	ASD	1	0	3889 369	91 0	0
Moisture Condition:	: Dry	Building Code:	IBC 2012	2	0	3812 36	14 0	0
Deflection LL:	360	Load Sharing:	Yes					
Deflection TL:	240	Deck:	Not Checked					
Importance:	Normal							
Temperature:	Temp <= 100°F							
				Bearing	gs			
				Bearing	g Length	Cap. React D/L lt	Total Ld. Case	Ld. Comb.
				1 - SPF End	3.500"	47% 3889 / 369°	7580 L	D+S
Analysis Result	s			Grain				
Analysis Act		Allowed Capac	ity Comb. Cas	e 2 - SPF End	3.500"	46% 3812 / 3614	7426 L	D+S

Grain

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	34254 ft-lb	9'2 1/8"	77108 ft-lb	0.444 (44%)	D+S	L
Unbraced	34254 ft-lb	9'2 1/8"	34270 ft-lb	1.000 (100%)	D+S	L
Shear	7544 lb	1'8 5/8"	23184 lb	0.325 (33%)	D+S	L
LL Defl inch	0.221 (L/998)	9'4"	0.613 (L/360)	0.360 (36%)	S	L
TL Defl inch	0.454 (L/486)	9'4"	0.920 (L/240)	0.490 (49%)	D+S	L

Design Notes

- 1 Fasten all plies using 3 rows of SDW22500 at 24" o.c. Maximum end distance not to exceed
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Simpson fasteners applied from a single side of the member use tip values where published.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at a maximum of 5'9 3/8" o.c.
- 7 Bottom braced at bearings.
- 8 Lateral slenderness ratio based on single ply width

o Lateral Sier	idemess ratio based t	on single ply widin.									
ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments	
1	Point	2-6-8		Тор	1493 lb	0 lb	1493 lb	0 lb	0 lb	B3	
2	Part. Uniform	3-3-8 to 18-10-0		Тор	374 PLF	0 PLF	374 PLF	0 PLF	0 PLF	B2	
	Self Weight				21 PLF						

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- IARIGUING & INSTALLATION

 LVL beams must not be cut or drilled

 Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beams trength 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

- For flat roofs provide proper drainage to prevent ponding

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Manufacturer Info

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Client: Project: Address: Weaver Development

Date: 5/7/2021

Input by: Curtis Quick Job Name: The Lauren H Beams Page 4 of 12

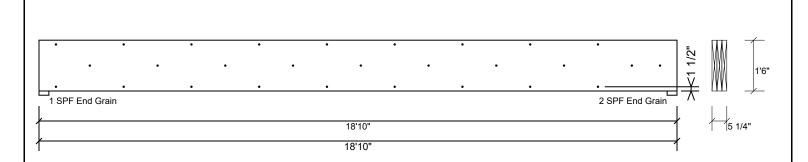
Project #:

Kerto-S LVL **GDH (Side Load)**

1.750" X 18.000"

3-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 3 rows of SDW22500 at 24" o.c., Maximum end distance not to exceed 12"

1		
Capacity	0.0 %	
Load	0.0 PLF	
Yield Limit per Foot	382.5 PLF	
Yield Limit per Fastener	255.0 lb.	
Yield Mode	Lookup	
Edge Distance	1 1/2"	
Min. End Distance	6"	
Load Combination		
Duration Factor	1.00	

Notes

NOtes
Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

- Handling & Installation

 1. UVI beams must not be cut or drilled

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

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

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

For flat roofs provide proper drainage to prevent ponding

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Manufacturer Info

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Client: Weaver Development

Project: Address:

Date: 5/7/2021 Input by: Curtis Quick

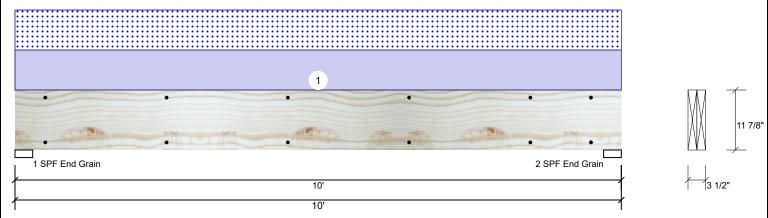
Job Name: The Lauren H Beams

Page 5 of 12

Project #:

1.750" X 11.875" 2-Ply - PASSED **Kerto-S LVL** GDH-1

Level: Level



Member Inforr	nation						Reaction	ns UNPAT	TERNEI	D lb (Uplift)			
Type:	Girder		Applicatio	n:	Floor		Brg	Live	Dead	Snow	,	Wind	Const
Plies:	2		Design Me	ethod:	ASD		1	0	1196	1150		0	0
Moisture Condition	: Dry		Building C	ode:	IBC 2012		2	0	1196	1150		0	0
Deflection LL:	360		Load Sha	ring:	No								
Deflection TL:	240		Deck:		Not Checked								
Importance:	Normal												
Temperature:	Temp <= 100°	F											
							Bearing	S					
							Bearing	Length	Cap. I	React D/L lb	Total	Ld. Case	Ld. Comb
							1 - SPF End	3.500"	22%	1196 / 1150	2346	L	D+S
Analysis Result	s		•				Grain						
Analysis Act	tual	Location	Allowed	Capacit	y Comb.	Case	2 - SPF End	3.500"	22%	1196 / 1150	2346	L	D+S
Moment 534	10 ft-lb	5'	22897 ft-lb	0 223 (2	3%) D+S	L	Grain						

L

L

L

L

LL Defl inch 0.051 (L/2238)

Unbraced

Shear

Design Notes 1 Fasten all plies using 2 rows of SDW22338 at 24" o.c. Maximum end distance not to exceed

5' 9721 ft-lb

8'9 3/8" 10197 lb

0.549 (55%) D+S

0.174 (17%) D+S

5' 0.318 (L/360) 0.160 (16%) S

5' 0.477 (L/240) 0.220 (22%) D+S

- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Simpson fasteners applied from a single side of the member use tip values where published.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.

5340 ft-lb

1774 lb

TL Defl inch 0.104 (L/1097)

- 6 Top braced at bearings.
- 7 Bottom braced at bearings.
- 8 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	Comments
1	Uniform			Тор	230 PLF	0 PLF	230 PLF	0 PLF	0 PLF	G1
	Self Weight				9 PLF					

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- 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

2 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

For flat roofs provide proper drainage to prevent ponding

This design is valid until 2/26/2023

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Manufacturer Info





Client: Weaver Development

Project: Address:

Date: 5/7/2021 Input by:

Curtis Quick Job Name: The Lauren H Beams Page 6 of 12

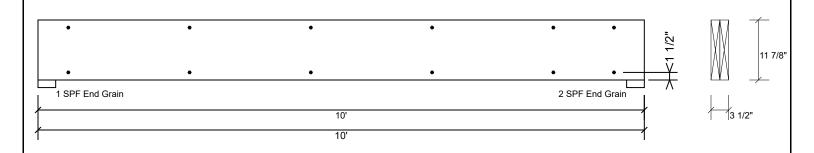
Project #:

Kerto-S LVL GDH-1

1.750" X 11.875"

2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 2 rows of SDW22338 at 24" o.c., Maximum end distance not to exceed 12"

1		
Capacity	0.0 %	
Load	0.0 PLF	
Yield Limit per Foot	255.0 PLF	
Yield Limit per Fastener	255.0 lb.	
Yield Mode	Lookup	
Edge Distance	1 1/2"	
Min. End Distance	6"	
Load Combination		
Duration Factor	1.00	

Notes

NOtes
Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

- Handling & Installation

 1. UVI beams must not be cut or drilled

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

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 2/26/2023

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Manufacturer Info





Client: Weaver Development

Project: Address:

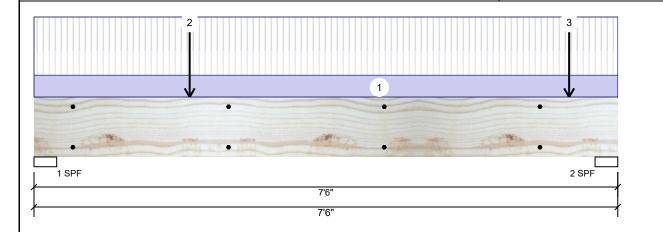
Date: 5/7/2021

Input by: Curtis Quick Job Name: The Lauren H Beams

Project #:

1.750" X 9.250" 2-Ply - PASSED Kerto-S LVL BM1

Level: Level



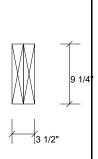
Floor

ASD

No

IBC 2012

Not Checked



Page 7 of 12

Member Information

Type: Plies: 2 Moisture Condition: Dry Deflection LL: 360 Deflection TL: 240 Importance: Normal

Temp <= 100°F Temperature:

Reactions UNPATTERNED Ib (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	150	959	876	0	0
2	150	1384	1300	0	0

Bearings

Bearing Length	Cap. React D/L	lb Total Ld. Case	Ld. Comb.
1 - SPF 3.500"	35% 959 / 8	76 1834 L	D+S
0 ODE 3 500"	E00/ 4004 / 40	00 0004 1	Dic

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3204 ft-lb	2'	14423 ft-lb	0.222 (22%)	D+S	L
Unbraced	3204 ft-lb	2'	9592 ft-lb	0.334 (33%)	D+S	L
Shear	1812 lb	1'	7943 lb	0.228 (23%)	D+S	L
LL Defl inch	0.030 (L/2815)	3'4 1/16"	0.235 (L/360)	0.130 (13%)	S	L
TL Defl inch	0.063 (L/1338)	3'4 7/16"	0.352 (L/240)	0.180 (18%)	D+S	L

Application:

Design Method:

Building Code:

Load Sharing:

Deck:

Design Notes

- 1 Fasten all plies using 2 rows of SDW22338 at 24" o.c. Maximum end distance not to exceed
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Simpson fasteners applied from a single side of the member use tip values where published.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top braced at bearings.
- 7 Bottom braced at bearings.
- 8 Lateral slenderness ratio based on single ply width

O Editoral biolid										
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	15 PLF	40 PLF	0 PLF	0 PLF	0 PLF	Floor
2	Point	2-0-0		Тор	1088 lb	0 lb	1088 lb	0 lb	0 lb	A6
3	Point	6-10-8		Тор	1088 lb	0 lb	1088 lb	0 lb	0 lb	A6
	Self Weight				7 PLF					

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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

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Manufacturer Info

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Client: Weaver Development

Project: Address: Date: 5/7/2021

Input by: Curtis Quick Job Name: The Lauren H Beams Page 8 of 12

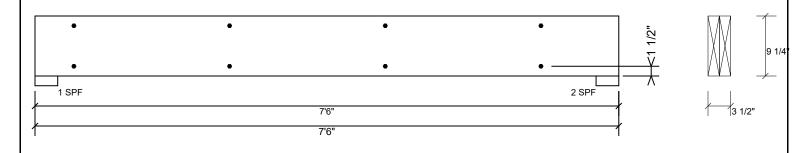
Project #:

Kerto-S LVL BM1

1.750" X 9.250"

2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 2 rows of SDW22338 at 24" o.c., Maximum end distance not to exceed 12"

1 3		
Capacity	0.0 %	
Load	0.0 PLF	
Yield Limit per Foot	255.0 PLF	
Yield Limit per Fastener	255.0 lb.	
Yield Mode	Lookup	
Edge Distance	1 1/2"	
Min. End Distance	6"	
Load Combination		
Duration Factor	1.00	

Notes

NOtes
Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

- Handling & Installation

 1. UVI beams must not be cut or drilled

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

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

 5. 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

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Client: Weaver Development

Project: Address:

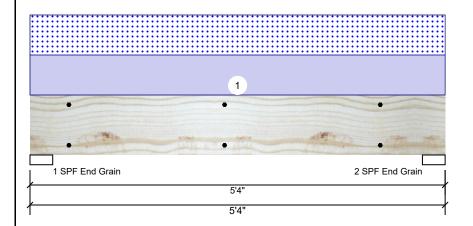
Date: 5/7/2021 Input by: Curtis Quick

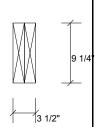
Job Name: The Lauren H Beams

Project #:

1.750" X 9.250" 2-Ply - PASSED **Kerto-S LVL** BM₂

Level: Level





Page 9 of 12

Member Information

Type: Plies: 2 Moisture Condition: Dry Deflection LL: 360 Deflection TL: 240 Importance: Normal Temperature: Temp <= 100°F

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

Reactions UNPATTERNED Ib (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	0	1686	1667	0	0
2	0	1686	1667	0	0

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3735 ft-lb	2'8"	14423 ft-lb	0.259 (26%)	D+S	L
Unbraced	3735 ft-lb	2'8"	11811 ft-lb	0.316 (32%)	D+S	L
Shear	2095 lb	1'	7943 lb	0.264 (26%)	D+S	L
LL Defl inch	0.024 (L/2457)	2'8"	0.162 (L/360)	0.150 (15%)	S	L
TL Defl inch	0.048 (L/1221)	2'8"	0.244 (L/240)	0.200 (20%)	D+S	L

Moment	3735 ft-lb	2'8"	14423 ft-lb	0.259 (26%) D+S	L	
Unbraced	3735 ft-lb	2'8"	11811 ft-lb	0.316 (32%) D+S	L	
Shear	2095 lb	1'	7943 lb	0.264 (26%) D+S	L	
LL Defl inch	0.024 (L/2457)	2'8"	0.162 (L/360)	0.150 (15%) S	L	
TL Defl inch	0.048 (L/1221)	2'8"	0.244 (L/240)	0.200 (20%) D+S	L	

Bearings

Bearing Leng	jtn Cap.	React D/L lb	Iotai	Ld. Case	La. Comb.
1 - SPF 3.500 End Grain)" 31%	1686 / 1667	3353	L	D+S
2 - SPF 3.500 End Grain)" 31%	1686 / 1667	3353	L	D+S

Design Notes

- 1 Fasten all plies using 2 rows of SDW22338 at 24" o.c. Maximum end distance not to exceed
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Simpson fasteners applied from a single side of the member use tip values where published.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top braced at bearings.
- 7 Bottom braced at bearings.
- 8 Lateral slenderness ratio based on single ply width.

Self Weight

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	625 PLF	0 PLF	625 PLF	0 PLF	0 PLF	A2

7 PI F

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- 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
- This design is valid until 2/26/2023

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





Client:

Project: Address: Weaver Development

Date: 5/7/2021 Input by: Curtis Quick

Job Name: The Lauren H Beams

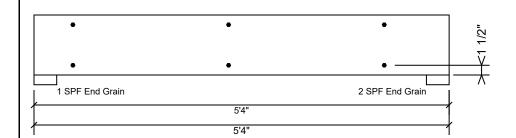
Project #:

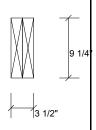
Kerto-S LVL BM₂

1.750" X 9.250"

2-Ply - PASSED

Level: Level





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Multi-Ply Analysis

Fasten all plies using 2 rows of SDW22338 at 24" o.c., Maximum end distance not to exceed 12"

rasteri ali piles asirig E i	0113 01 3D 11 LL330 at L 1	0.0 1110
Capacity	0.0 %	
Load	0.0 PLF	
Yield Limit per Foot	255.0 PLF	
Yield Limit per Fastener	255.0 lb.	
Yield Mode	Lookup	
Edge Distance	1 1/2"	
Min. End Distance	6"	
Load Combination		
Duration Factor	1.00	

Notes

NOtes
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Handling & Installation

- Handling & Installation

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

Manufacturer Info



Client: Weaver Development

Project: Address: Date: 5/7/2021

Input by: Curtis Quick Job Name: The Lauren H Beams

Project #:

1.750" X 9.250" 2-Ply - PASSED Kerto-S LVL BM₃

Application:

Design Method:

Building Code:

Load Sharing:

Deck:

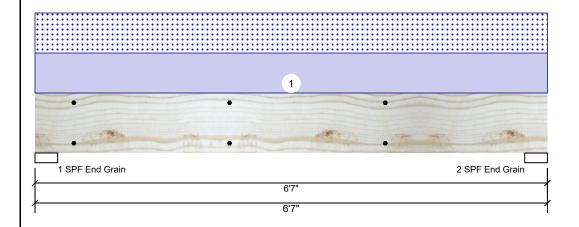
ASD

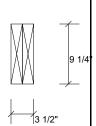
No

IBC 2012

Not Checked

Level: Level





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Member Information

Type: Plies: 2 Moisture Condition: Dry Deflection LL: 360 Deflection TL: 240 Importance: Temperature:

Normal

Temp <= 100°F

Reactions UNPATTERNED Ib (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	0	2400	2377	0	0
2	0	2400	2377	0	0

Bearings

Grain

Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1-SPF 3.500" 2400 / 2377 D+S 4777 L End Grain 2 - SPF 3.500" 2400 / 2377 4777 L D+S End

Analysis Results

•						
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	6805 ft-lb	3'3 1/2"	14423 ft-lb	0.472 (47%)	D+S	L
Unbraced	6805 ft-lb	3'3 1/2"	10451 ft-lb	0.651 (65%)	D+S	L
Shear	3326 lb	1'	7943 lb	0.419 (42%)	D+S	L
LL Defl inch	0.062 (L/1194)	3'3 1/2"	0.204 (L/360)	0.300 (30%)	S	L
TL Defl inch	0.124 (L/594)	3'3 1/2"	0.306 (L/240)	0.400 (40%)	D+S	L

Design Notes

- 1 Fasten all plies using 2 rows of SDW22338 at 24" o.c. Maximum end distance not to exceed
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Simpson fasteners applied from a single side of the member use tip values where published.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top braced at bearings.
- 7 Bottom braced at bearings.
- 8 Lateral slenderness ratio based on single ply width.

Self Weight

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	722 PLF	0 PLF	722 PLF	0 PLF	0 PLF	A2

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7 PI F

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



Client:

Project: Address: Weaver Development

Date: 5/7/2021 Input by:

Curtis Quick Job Name: The Lauren H Beams

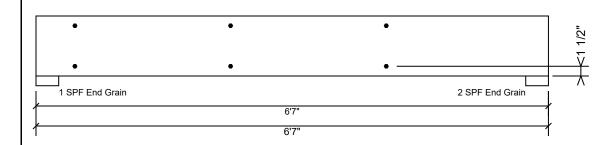
Project #:

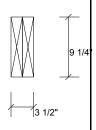
Kerto-S LVL BM3

1.750" X 9.250"

2-Ply - PASSED

Level: Level





Page 12 of 12

Multi-Ply Analysis

Fasten all plies using 2 rows of SDW22338 at 24" o.c., Maximum end distance not to exceed 12"

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Yield Limit per Foot	255.0 PLF
Yield Limit per Fastener	255.0 lb.
Yield Mode	Lookup
Edge Distance	1 1/2"
Min. End Distance	6"
Load Combination	
Duration Factor	1.00

Notes

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This design is valid until 2/26/2023 CSD BUILD