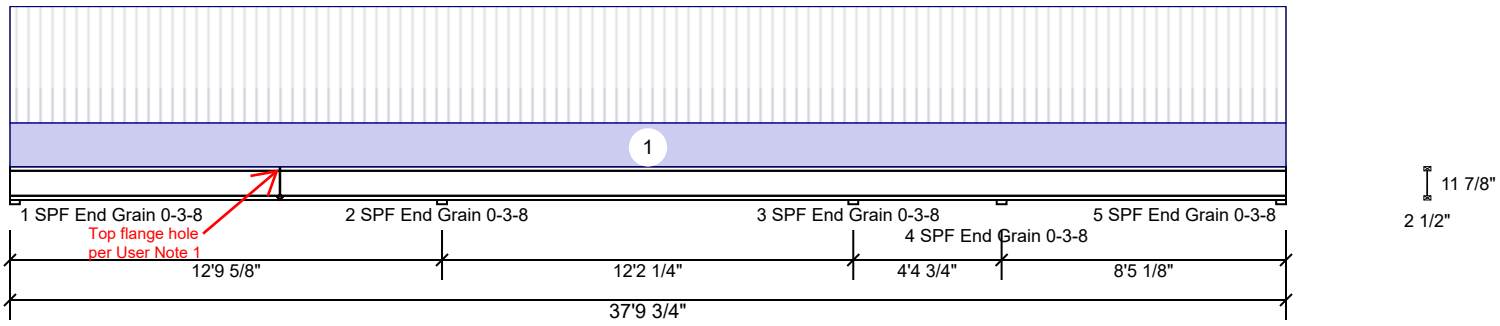
Client:	New Home Inc	Date:	3/19/2025
Project:		Input by:	Johnnie Baggett
Address:	1723 Neills Creek Road, Lillington NC	Job Name:	The Selma
		Project #:	J1023-5899/5900

FJ1 NI-40x 11.875" - No Repair Required
See User Note 1

Level: Level



Member Information

Type:	Joist	Application:	Floor
Spacing:	19.2" o.c.	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	23/32 APA Rated Sturd-I-FloorOSB Nailed and Glued
Importance:	Normal - II	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F	Vibration:	OK
		Vibration Methodology:	CCMC - CSAO86-19
		Vibration Span:	18-7-0 (68%)
		Vibration Span:	18-7-0 (66%)
		Vibration Span:	18-7-0 (24%)
		Vibration Span:	18-7-0 (44%)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-1457 ft-lb	12'9 5/8"	3760 ft-lb	39%	D+L	LL__
Pos Moment	1264 ft-lb	5'7 1/16"	3760 ft-lb	34%	D+L	L_LL
Shear	656 lb	12'7 7/8"	1480 lb	44%	D+L	LL__
LL Defl inch	0.075 (L/2001)	6'3 1/16"	0.314 (L/480)	24%	L	L_LL
TL Defl inch	0.098 (L/1542)	6'2 1/4"	0.419 (L/360)	23%	D+L	L_LL
LL Bare Defl	0.088 (L/1717)	6'2 13/16"	0.419 (L/360)	21%	L	40 PSF L

Design Notes

1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
2 Unsupported length Lu based on points of zero moments.

User Notes

1 Location analysis indicates center of 1/2" diameter vertical hole in one leg of top flange. The web was not disturbed. No repair required.

Reactions PATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	368 (-19)	125	0	0	0
2	Vertical	925 (-5)	345	0	0	0
3	Vertical	680 (-155)	197	0	0	0
4	Vertical	532 (-130)	151	0	0	0
5	Vertical	246	89	0	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	34%	125 / 367	492	L_L_	D+L
2 - SPF End Grain	3.500"	Vert	42%	346 / 927	1273	LL__	D+L
3 - SPF End Grain	3.500"	Vert	30%	196 / 690	886	_LL_	D+L
4 - SPF End Grain	3.500"	Vert	23%	151 / 544	695	L_LL	D+L
5 - SPF End Grain	3.500"	Vert	23%	89 / 244	333	___L	D+L

Location Analysis

Analysis Type	Location	Max Value	Ld. Comb.	Ld. Case
Neg Moment	8'	-59 ft-lb	D+L	_L__
Pos Moment	8'	1009 ft-lb	D+L	L_LL
Shear	8'	247 lb	D+L	LL__
Down Defl	8'	0.088	D+L	L_LL

ID	Load Type	Location	Trib Width	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform		1-7-3	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	FLOOR

Notes
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.

Engineered Wood Products
1. Dry service conditions, unless noted otherwise
2. No treatment with fire-retardant or other strength-reducing chemicals.

Handling & Installation
1. Engineered wood products must not be cut or drilled. Damaged products shall not be used.
2. Refer to the latest version of the installation guide for construction details, hole specifications, multiple-member connections, and handling guidelines.
3. Provide lateral support at bearing points to prevent lateral displacement and rotation.
4. For flat roof, provide proper drainage to prevent ponding.
5. Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

This design is valid until 9/3/2027

Manufacturer Info

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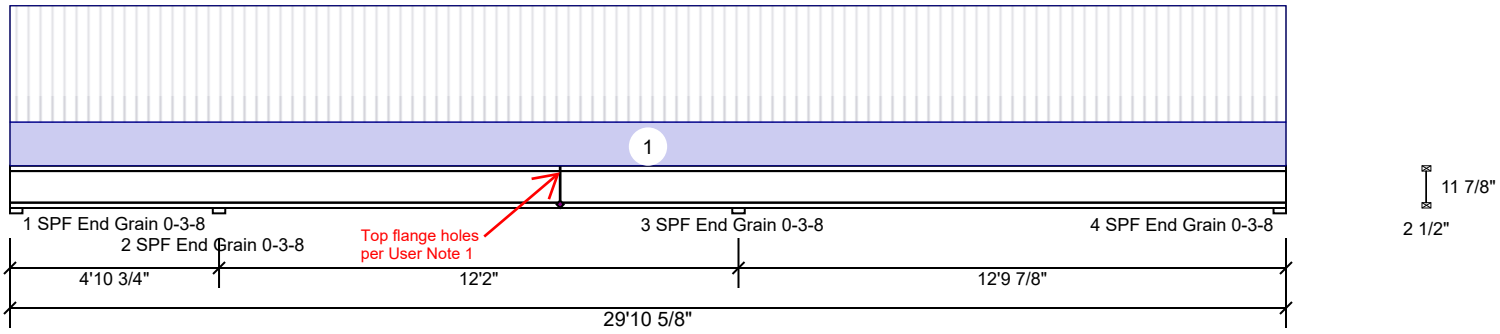
www.nordic.ca
APA PR-L274C

Client:	New Home Inc	Date:	3/19/2025
Project:		Input by:	Johnnie Baggett
Address:	1723 Neills Creek Road, Lillington NC	Job Name:	The Selma
		Project #:	J1023-5899/5900

FJ2 NI-40x 11.875" - No Repair Required See User Note 1

Level: Level



Member Information

Type:	Joist	Application:	Floor
Spacing:	19.2" o.c.	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	23/32 APA Rated Sturd-I-FloorOSB Nailed and Glued
Importance:	Normal - II	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F	Vibration:	OK
		Vibration Methodology:	CCMC - CSAO86-19
		Vibration Span:	18-7-0 (25%)
		Vibration Span:	18-7-0 (65%)
		Vibration Span:	18-7-0 (68%)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-1459 ft-lb	17' 3/4"	3760 ft-lb	39%	D+L	_LL
Pos Moment	1269 ft-lb	24'3 7/16"	3760 ft-lb	34%	D+L	L_L
Shear	657 lb	17'2 1/2"	1480 lb	44%	D+L	_LL
LL Defl inch	0.076 (L/1994)	23'7 1/2"	0.315 (L/480)	24%	L	L_L
TL Defl inch	0.098 (L/1537)	23'8 1/4"	0.420 (L/360)	23%	D+L	L_L
LL Bare Defl	0.088 (L/1709)	23'7 11/16"	0.420 (L/360)	21%	L	40 PSF L

Design Notes

1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
2 Unsupported length Lu based on points of zero moments.

User Notes

1 Location analysis indicates mid-point between two, 1/2" diameter vertical holes in one leg of top flange. The web was not disturbed. No repair required.

Reactions PATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	188 (-113)	23	0	0	0
2	Vertical	694 (-97)	224	0	0	0
3	Vertical	926 (-5)	345	0	0	0
4	Vertical	369 (-19)	126	0	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	15%	22 / 191	213 (-95)	L_L	D+L(D+L)
2 - SPF End Grain	3.500"	Vert	31%	224 / 700	924	LL_	D+L
3 - SPF End Grain	3.500"	Vert	42%	346 / 928	1274	_LL	D+L
4 - SPF End Grain	3.500"	Vert	34%	125 / 368	493	L_L	D+L

Location Analysis

Analysis Type	Location	Max Value	Ld. Comb.	Ld. Case
Neg Moment	12'10 5/8"	-293 ft-lb	D+L	L_L
Pos Moment	12'10 5/8"	657 ft-lb	D+L	_L_
Shear	12'10 5/8"	236 lb	D+L	_LL
Down Defl	12'10 5/8"	0.056	D+L	_L_
Up Defl	12'10 5/8"	0.008	D+L	L_L

ID	Load Type	Location	Trib Width	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform		1-7-3	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	FLOOR

Notes

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.

Engineered Wood Products

1. Dry service conditions, unless noted otherwise
2. No treatment with fire-retardant or other strength-reducing chemicals.

Handling & Installation

1. Engineered wood products must not be cut or drilled. Damaged products shall not be used.
2. Refer to the latest version of the installation guide for construction details, hole specifications, multiple-member connections, and handling guidelines.
3. Provide lateral support at bearing points to prevent lateral displacement and rotation.
4. For flat roof, provide proper drainage to prevent ponding.
5. Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

This design is valid until 9/3/2027

Manufacturer Info

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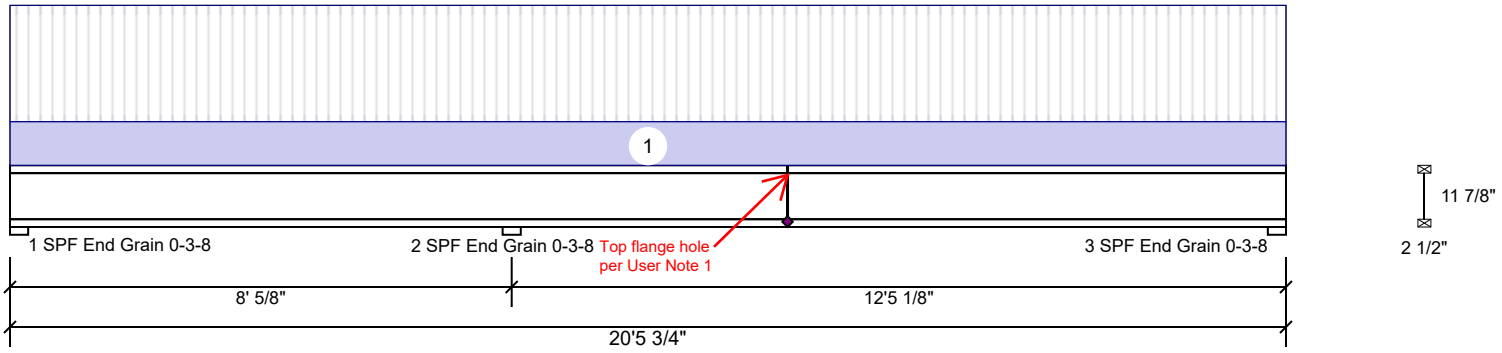
www.nordic.ca
APA PR-L274C

Client:	New Home Inc	Date:	3/19/2025
Project:		Input by:	Johnnie Baggett
Address:	1723 Neills Creek Road, Lillington NC	Job Name:	The Selma
		Project #:	J1023-5899/5900

FJ3 NI-40x 11.875" - No Repair Required See User Note 1

Level: Level



Member Information

Type:	Joist	Application:	Floor
Spacing:	19.2" o.c.	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	23/32 APA Rated Sturd-I-FloorOSB Nailed and Glued
Importance:	Normal - II	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F	Vibration:	OK
		Vibration Methodology:	CCMC - CSAO86-19
		Vibration Span:	18-7-0 (42%)
		Vibration Span:	18-7-0 (66%)

Reactions PATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	243 (-67)	60	0	0	0
2	Vertical	811	304	0	0	0
3	Vertical	352	127	0	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	21%	60 / 242	302 (-10)	L_	D+L(D+L)
2 - SPF End Grain	3.500"	Vert	37%	306 / 814	1120	LL	D+L
3 - SPF End Grain	3.500"	Vert	33%	126 / 352	478	_L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-1141 ft-lb	8' 5/8"	3760 ft-lb	30%	D+L	LL
Pos Moment	1189 ft-lb	15' 5/8"	3760 ft-lb	32%	D+L	_L
Shear	617 lb	8'2 3/8"	1480 lb	42%	D+L	LL
LL Defl inch	0.066 (L/2227)	14'5 1/4"	0.305 (L/480)	22%	L	_L
TL Defl inch	0.088 (L/1660)	14'5 9/16"	0.407 (L/360)	22%	D+L	_L
LL Bare Defl	0.076 (L/1920)	14'5 1/2"	0.407 (L/360)	19%	L	40 PSF L

Location Analysis

Analysis Type	Location	Max Value	Ld. Comb.	Ld. Case
Pos Moment	12'5 3/4"	897 ft-lb	D+L	_L
Shear	12'5 3/4"	241 lb	D+L	LL
Down Defl	12'5 3/4"	0.077	D+L	_L

Design Notes

1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
2 Unsupported length Lu based on points of zero moments.

User Notes

1 Location analysis indicates center of 1/2" diameter vertical hole in face of one leg of top flange. No repair required.

ID	Load Type	Location	Trib Width	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform		1-7-3	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	FLOOR

Notes

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.

Engineered Wood Products

1. Dry service conditions, unless noted otherwise
2. No treatment with fire-retardant or other strength-reducing chemicals.

Handling & Installation

1. Engineered wood products must not be cut or drilled. Damaged products shall not be used.
2. Refer to the latest version of the installation guide for construction details, hole specifications, multiple-member connections, and handling guidelines.
3. Provide lateral support at bearing points to prevent lateral displacement and rotation.
4. For flat roof, provide proper drainage to prevent ponding.
5. Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

This design is valid until 9/3/2027

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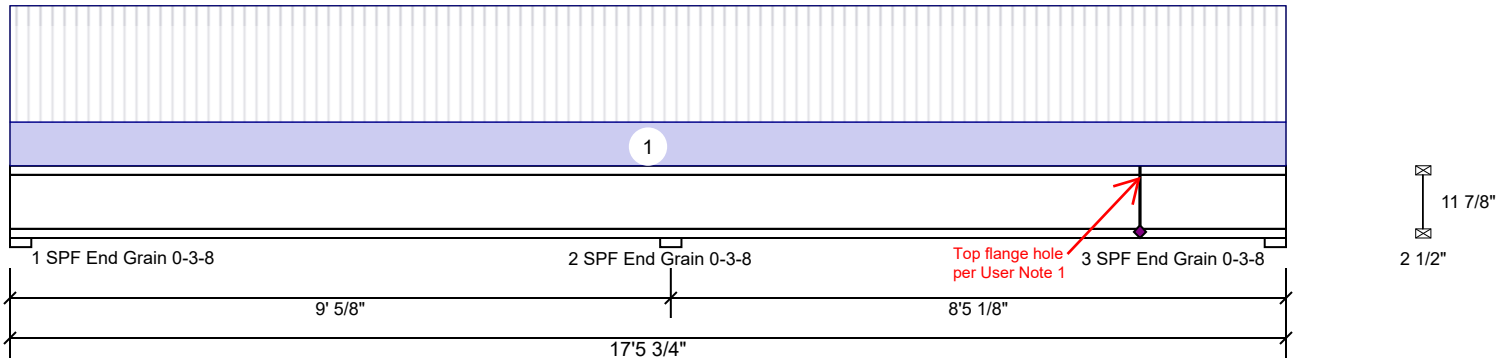
APA PR-L274C

Client:	New Home Inc	Date:	3/19/2025
Project:		Input by:	Johnnie Baggett
Address:	1723 Neills Creek Road, Lillington NC	Job Name:	The Selma
		Project #:	J1023-5899/5900

FJ4 NI-40x 11.875" - No Repair Required
See User Note 1

Level: Level



Member Information

Type:	Joist	Application:	Floor
Spacing:	19.2" o.c.	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	23/32 APA Rated Sturd-I-FloorOSB Nailed and Glued
Importance:	Normal - II	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F	Vibration:	OK
		Vibration Methodology:	CCMC - CSAO86-19
		Vibration Span:	18-7-0 (47%)
		Vibration Span:	18-7-0 (44%)

Reactions PATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	266 (-10)	90	0	0	0
2	Vertical	662	248	0	0	0
3	Vertical	250 (-19)	81	0	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	25%	90 / 265	355	L_	D+L
2 - SPF End Grain	3.500"	Vert	30%	249 / 665	914	LL	D+L
3 - SPF End Grain	3.500"	Vert	23%	80 / 250	330	_L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-703 ft-lb	9' 5/8"	3760 ft-lb	19%	D+L	LL
Pos Moment	635 ft-lb	4' 3/8"	3760 ft-lb	17%	D+L	L_
Shear	455 lb	8'10 7/8"	1480 lb	31%	D+L	LL
LL Defl inch	0.024 (L/4471)	4'6 1/8"	0.221 (L/480)	11%	L	L_
TL Defl inch	0.031 (L/3409)	4'5 5/8"	0.294 (L/360)	11%	D+L	L_
LL Bare Defl	0.027 (L/3950)	4'5 7/8"	0.294 (L/360)	9%	L	40 PSF L

Location Analysis

Analysis Type	Location	Max Value	Ld. Comb.	Ld. Case
Pos Moment	15'5 3/4"	410 ft-lb	D+L	_L
Shear	15'5 3/4"	154 lb	D+L	_L
Down Defl	15'5 3/4"	0.017	D+L	_L

Design Notes

1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
2 Unsupported length Lu based on points of zero moments.

User Notes

1 Location analysis indicates center of 1/2" diameter vertical hole in face of one leg of top flange. No repair required.

ID	Load Type	Location	Trib Width	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform		1-7-3	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	FLOOR

Notes

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.

Engineered Wood Products

1. Dry service conditions, unless noted otherwise
2. No treatment with fire-retardant or other strength-reducing chemicals.

Handling & Installation

1. Engineered wood products must not be cut or drilled. Damaged products shall not be used.
2. Refer to the latest version of the installation guide for construction details, hole specifications, multiple-member connections, and handling guidelines.
3. Provide lateral support at bearing points to prevent lateral displacement and rotation.
4. For flat roof, provide proper drainage to prevent ponding.
5. Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

This design is valid until 9/3/2027

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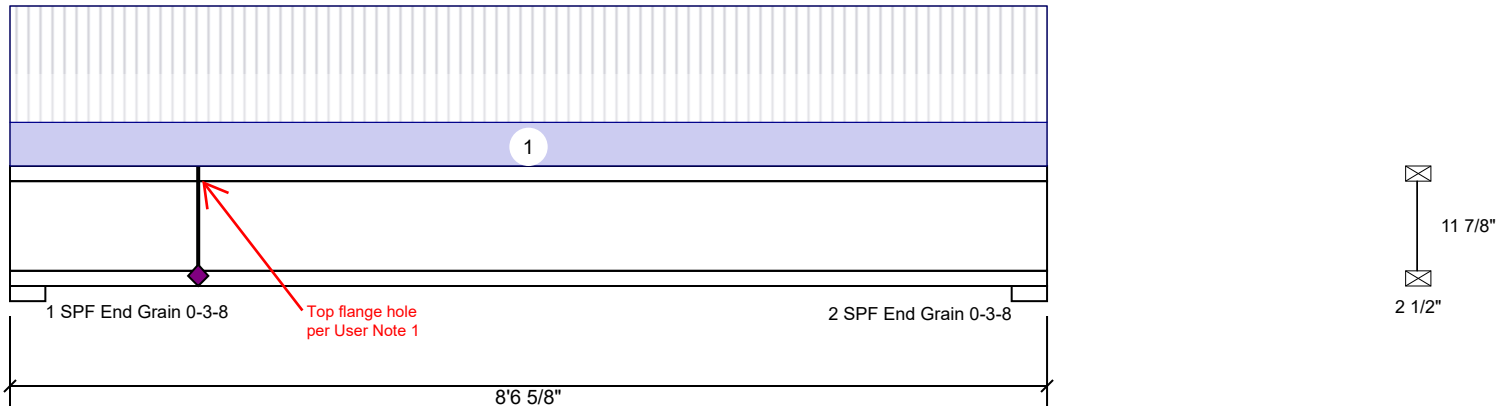
Client:	New Home Inc	Date:	3/19/2025
Project:		Input by:	Johnnie Baggett
Address:	1723 Neills Creek Road, Lillington NC	Job Name:	The Selma
		Project #:	J1023-5899/5900

FJ6 NI-40x 11.875" - No Repair Required See User Note 1

Level: Level



Member Information

Type:	Joist	Application:	Floor
Spacing:	19.2" o.c.	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	23/32 APA Rated Sturd-I-FloorOSB Nailed and Glued
Importance:	Normal - II	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F	Vibration:	OK
		Vibration Methodology:	CCMC - CSAO86-19
		Vibration Span:	17-8-4 (46%)

Reactions PATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	274	103	0	0	0
2	Vertical	274	103	0	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	26%	103 / 273	376	L	D+L
2 - SPF End Grain	3.500"	Vert	26%	103 / 273	376	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	721 ft-lb	4'3 5/16"	3760 ft-lb	19%	D+L	L
Shear	351 lb	3 1/2"	1480 lb	24%	D+L	L
LL Defl inch	0.022 (L/4491)	4'3 3/8"	0.202 (L/480)	11%	L	L
TL Defl inch	0.030 (L/3266)	4'3 3/8"	0.270 (L/360)	11%	D+L	L
LL Bare Defl	0.025 (L/3917)	4'3 3/8"	0.270 (L/360)	9%	L	40 PSF L

Location Analysis

Analysis Type	Location	Max Value	Ld. Comb.	Ld. Case
Pos Moment	1'6 5/8"	394 ft-lb	D+L	L
Shear	1'6 5/8"	240 lb	D+L	L
Down Defl	1'6 5/8"	0.015	D+L	L

Design Notes

1 Provide support to prevent lateral movement and rotation at the end bearings.
2 Unsupported length Lu based on points of zero moments.

User Notes

1 Location analysis indicates center of 1/2" diameter vertical hole in face of one leg of top flange. No repair required.

ID	Load Type	Location	Trib Width	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform		1-7-3	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	FLOOR

Notes

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.

Engineered Wood Products

1. Dry service conditions, unless noted otherwise
2. No treatment with fire-retardant or other strength-reducing chemicals.

Handling & Installation

1. Engineered wood products must not be cut or drilled. Damaged products shall not be used.
2. Refer to the latest version of the installation guide for construction details, hole specifications, multiple-member connections, and handling guidelines.
3. Provide lateral support at bearing points to prevent lateral displacement and rotation.
4. For flat roof, provide proper drainage to prevent ponding.
5. Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

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