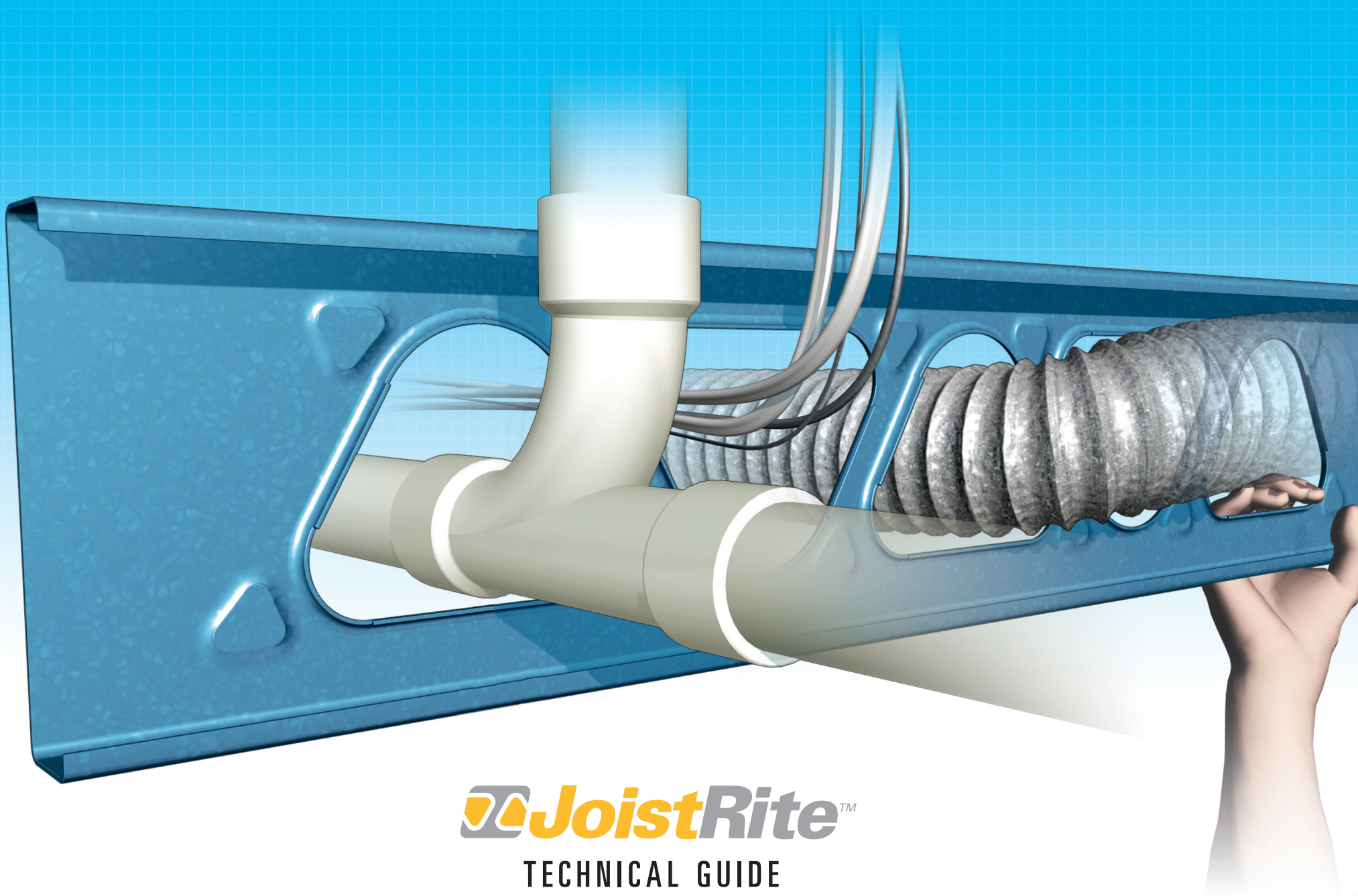




 **JoistRite™**

TECHNICAL GUIDE
SUPERIOR ENGINEERED FLOOR FRAMING SYSTEM

 **FrameRite™**
Building Stronger With Steel.

SUPERIOR ENGINEERED JOIST

JoistRite™ is a specially designed, patented, cold-formed steel section that has one of the highest strength-to-mass ratios of any structural material in the market today, due to the lip reinforced triangular cutouts along the length of its web. Its excellent thermal, fire and acoustic properties make it unique.

The JoistRite line of products is specifically engineered to provide the construction industry with an innovative and cost-effective building system. It offers complete versatility and total compatibility, as the JoistRite sections can be used on their own or be integrated with other standard construction materials and building systems.

A Precision Product

JoistRite is supplied as a precision product. Sections are manufactured to length in the plant, minimizing the need for on-site cutting. Another labor-saving feature.

Improved Thermal, Fire and Acoustic Ratings

The "open web" design of JoistRite sections reduces the temperature conductivity, thereby significantly enhancing thermal efficiency. Extensive fire tests have been carried out, and in a direct comparison test, the JoistRite joists proved to have a higher fire rating than standard joists with a conventional design.

Test Data

UL L580 1 Hour Fire Rating

STC = 52 & 59 IIC = 45, 68 & 74

MEA = 139-04-M

WHI

WHI

JoistRite Identification System (in compliance with SSMA)

1000-JR-200-54

- Member Depth 10" = 1000 1/100 in.
- Style: JR = JoistRite
- Flange Width: 2" = 200" = 200x1/100 in.
- Material Thickness: Minimum Base Metal Thickness:
0.054 in. = 54 mils (1 mil = 1/1000 in.)

Speeds Up Construction and Reduces Labor Costs

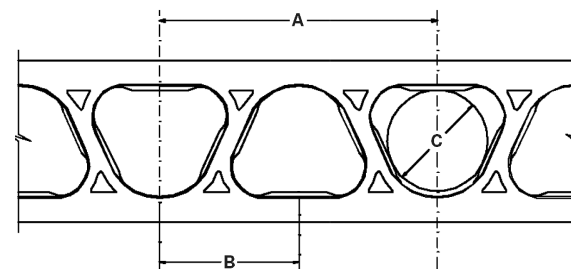
The "open web" design created by the cutouts substantially reduces the weight of JoistRite, making handling much easier and safer. The holes also speed up the installation of electrical, plumbing and heating services by virtually eliminating the need to cut or drill holes, resulting in reduced labor costs. Patented plastic grommets are available for the cutouts.

Design Flexibility

Architects, Engineers and Builders have the option to use stick or frame construction, or a combination of both. With JoistRite almost any structural design is possible. JoistRite is supplied in a complete range of sizes to meet engineering specifications for wind-bearing and load-bearing walls, floor and ceiling joists and roof trusses. It is strong enough to support up to seven stories as a self-supporting load-bearing structure and can be utilized in much higher structures when used as an infill application.

A Durable Building Product

JoistRite will not swell, warp, burn, rot or attract or support insect (termite) infestations. The highest-quality zinc coating (G-90) helps to protect JoistRite from time-dependent deterioration mechanisms involving moisture.

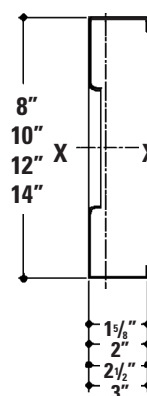


Hole Sizes:

Section Depth in.	A Pitch in.	B 1/2 Pitch in.	C Max. Diameter in.
8	14.0	7.00	5.5
10	28.0	14.00	7.2
12	35.0	17.50	9.2
14	35.0	17.50	9.2

Steel Thickness:

Product		Design		Minimum		ASTM C955 Color Code
Gauge	Mils	(in.)	(mm)	(in.)	(mm)	
18	43	0.0451	1.15	0.0428	1.09	Yellow
16	54	0.0566	1.44	0.0538	1.37	Green
14	68	0.0713	1.81	0.0677	1.72	Orange
12	97	0.1017	2.58	0.0966	2.45	Red



Finish:

Galvanized in accordance with ASTM A924. Products will be furnished with a G-90 hot-dipped galvanized coating.

Grades of Steel:

18 gauge joists
 F_y (min) = 33 ksi

16, 14 and 12 gauge joists
 F_y (min) = 50 ksi

Manufactured to desired lengths.

Other web sizes available upon request.

SYMBOLS AND DEFINITIONS

F_y	Yield point of steel used for design.
I_x	Moment of inertia of net section about x-axis.
S_x	Section modulus of net section about x-axis.
r_x	Radius of gyration of net section about x-axis.
I_y	Moment of inertia of net section about y-axis.
r_y	Radius of gyration of net section about y-axis.
I_{xed}	Effective moment of inertia of net section about x-axis based on a stress of $0.6F_y$ (deflection determination).
S_{xe}	Effective section modulus of net section about x-axis based on a stress of F_y (strength determination).
M_a	Allowable bending moment.
V_a	Allowable shear force.
J	Saint-Venant torsion constant of net section.
C_w	Torsional warping constant of net section.
r_o	Polar radius of gyration of net section about shear center.

PHYSICAL AND STRUCTURAL PROPERTIES

JOISTRITE™

Member Physical Properties							Effective Section Properties						Net Effective Properties				Torsional Properties		
Members	Hole Size (in.)	Web (in.)	Flange (in.)	Lip (in.)	Design Thickness (in.)	Weight (plf)	Area (in. ²)	I _x (in. ⁴)	S _x (in. ³)	r _x (in.)	I _y (in. ⁴)	r _y (in.)	I _{xed} (in. ⁴)	S _{xe} (in. ³)	M _a (k-in.)	V _a (k)	Jx1000 (in. ⁴)	C _w (in. ⁶)	r ₀ (in.)
8" MEMBERS																			
800JR200-43	5.5	8.00	2.00	0.75	0.0451	1.56	0.380	5.07	1.27	3.65	0.213	0.748	5.07	1.21	24.0	0.840	0.258	3.78	4.14
800JR200-54	5.5	8.00	2.00	0.75	0.0566	1.94	0.417	6.27	1.57	3.65	0.260	0.742	6.26	1.50	44.9	1.67	0.503	4.58	4.13
800JR200-68	5.5	8.00	2.00	0.75	0.0713	2.42	0.583	7.73	1.93	3.64	0.315	0.735	7.73	1.93	57.9	3.38	0.987	5.61	4.12
800JR200-97	5.5	8.00	2.00	0.75	0.1017	3.38	0.800	10.60	2.64	3.63	0.414	0.719	10.6	2.64	79.1	8.71	2.76	7.54	4.10
800JR250-43	5.5	8.00	2.50	0.75	0.0451	1.71	0.425	5.78	1.45	3.69	0.363	0.924	5.72	1.30	25.7	0.840	0.288	6.25	4.42
800JR250-54	5.5	8.00	2.50	0.75	0.0566	2.14	0.528	7.16	1.79	3.68	0.444	0.918	7.07	1.54	46.2	1.67	0.563	7.69	4.41
800JR250-68	5.5	8.00	2.50	0.75	0.0713	2.67	0.654	8.85	2.21	3.68	0.541	0.909	8.85	1.97	58.9	3.38	1.11	9.45	4.40
800JR250-97	5.5	8.00	2.50	0.75	0.1017	3.72	0.902	12.2	3.04	3.67	0.718	0.892	12.20	2.99	89.6	8.71	3.11	12.80	4.38
800JR300-43	5.5	8.00	3.00	0.75	0.0451	1.87	0.470	6.51	1.63	3.72	0.584	1.11	6.25	1.37	27.1	0.840	0.319	9.57	4.74
800JR300-54	5.5	8.00	3.00	0.75	0.0566	2.33	0.584	8.07	2.02	3.72	0.716	1.11	7.59	1.58	47.4	1.67	0.624	11.8	4.73
800JR300-68	5.5	8.00	3.00	0.75	0.0713	2.91	0.725	9.99	2.50	3.71	0.875	1.10	9.66	2.03	60.9	3.38	1.23	14.5	4.71
800JR300-97	5.5	8.00	3.00	0.75	0.1017	4.07	1.00	13.80	3.44	3.70	1.17	1.08	13.8	3.18	95.3	8.71	3.46	19.8	4.69
800JT250-54	N/A	8.00	2.50	N/A	0.0566	2.29	0.671	5.70	1.57	2.93	0.263	0.626	5.70	1.47	24.1	4.12	0.717	1.87	3.59
10" MEMBERS																			
1000JR200-54	7.2	10.00	2.00	0.75	0.0566	2.27	0.483	10.28	2.06	4.61	0.267	0.744	10.28	1.97	59.0	1.33	0.516	7.19	4.98
1000JR200-68	7.2	10.00	2.00	0.75	0.0713	2.84	0.599	12.7	2.54	4.61	0.324	0.736	12.7	2.54	76.1	2.68	1.01	8.81	4.97
1000JR200-97	7.2	10.00	2.00	0.75	0.1017	3.97	0.823	17.4	3.48	4.60	0.427	0.721	17.4	3.48	104	7.89	2.84	11.9	4.95
1000JR250-54	7.2	10.00	2.50	0.75	0.0566	2.46	0.540	11.7	2.34	4.65	0.457	0.920	11.5	2.02	60.4	1.33	0.577	12.1	5.22
1000JR250-68	7.2	10.00	2.50	0.75	0.0713	3.08	0.670	14.5	2.89	4.65	0.557	0.921	14.5	2.57	76.9	2.68	1.14	14.8	5.21
1000JR250-97	7.2	10.00	2.50	0.75	0.1017	4.31	0.924	19.9	3.98	4.64	0.740	0.895	19.9	3.92	117	7.89	3.19	20.2	5.19
1000JR300-54	7.2	10.00	3.00	0.75	0.0566	2.66	0.597	13.1	2.62	4.69	0.734	1.11	12.3	2.06	61.8	1.33	0.637	18.5	5.49
1000JR300-68	7.2	10.00	3.00	0.75	0.0713	3.32	0.741	16.3	3.25	4.68	0.898	1.10	15.7	2.65	79.4	2.68	1.26	22.9	5.48
1000JR300-97	7.2	10.00	3.00	0.75	0.1017	4.66	1.03	22.4	4.48	4.67	1.20	1.08	22.4	4.14	124.0	7.89	3.54	31.2	5.45
1000JT250-54	N/A	10.00	2.50	N/A	0.0566	2.66	0.784	10.0	2.16	3.57	0.275	0.592	10.0	2.00	30.8	4.13	0.838	3.14	4.38
12" MEMBERS																			
1200JR200-54	9.2	12.00	2.00	0.75	0.0566	2.47	0.496	15.5	2.58	5.59	0.267	0.734	15.5	2.48	74.2	1.10	0.53	10.28	5.89
1200JR200-68	9.2	12.00	2.00	0.75	0.0713	3.08	0.615	19.2	3.20	5.58	0.324	0.726	19.2	3.20	95.7	2.22	1.04	12.61	5.88
1200JR200-97	9.2	12.00	2.00	0.75	0.1017	4.32	0.846	26.3	4.38	5.58	0.426	0.710	26.3	4.38	131.0	6.52	2.92	17.02	5.86
1200JR250-54	9.2	12.00	2.50	0.75	0.0566	2.66	0.553	17.5	2.92	5.63	0.458	0.910	17.3	2.53	75.8	1.10	0.591	17.3	6.10
1200JR250-68	9.2	12.00	2.50	0.75	0.0713	3.33	0.686	21.7	3.62	5.62	0.558	0.902	21.7	3.22	96.5	2.22	1.16	21.3	6.09
1200JR250-97	9.2	12.00	2.50	0.75	0.1017	4.67	0.947	29.9	4.98	5.62	0.740	0.884	29.9	4.91	147.0	6.52	3.27	28.9	6.07
1200JR300-54	9.2	12.00	3.00	0.75	0.0566	2.85	0.610	19.6	3.26	5.67	0.736	1.10	18.5	2.59	77.4	1.10	0.651	26.5	6.33
1200JR300-68	9.2	12.00	3.00	0.75	0.0713	3.57	0.757	24.3	4.05	5.66	0.900	1.09	23.5	3.32	99.3	2.22	1.28	32.7	6.32
1200JR300-97	9.2	12.00	3.00	0.75	0.1017	5.01	1.05	33.5	5.59	5.65	1.20	1.07	33.5	5.17	155.0	6.52	3.62	44.8	6.30
1200JT250-54	N/A	12.00	2.50	N/A	0.0566	3.04	0.893	15.7	2.79	4.18	0.284	0.563	15.7	2.59	39.5	3.95	0.954	4.73	5.18
14" MEMBERS																			
1400JR200-54	9.2	14.00	2.00	0.75	0.0566	2.85	0.610	24.0	3.42	6.27	0.328	0.733	24.0	3.30	98.9	0.94	0.651	16.0	6.47
1400JR200-68	9.2	14.00	2.00	0.75	0.0713	3.57	0.757	29.7	4.25	6.26	0.399	0.726	29.7	4.25	127.0	1.89	1.28	19.7	6.46
1400JR200-97	9.2	14.00	2.00	0.75	0.1017	5.01	1.05	41.0	5.86	6.25	0.530	0.711	41.0	5.86	175.0	5.55	3.62	26.6	6.45
1400JR250-54	9.2	14.00	2.50	0.75	0.0566	3.05	0.666	26.7	3.82	6.33	0.556	0.913	26.4	3.37	101.0	0.94	0.711	26.8	6.66
1400JR250-68	9.2	14.00	2.50	0.75	0.0713	3.81	0.829	33.2	4.74	6.33	0.679	0.905	33.2	4.29	128.0	1.89	1.40	33.1	6.65
1400JR250-97	9.2	14.00	2.50	0.75	0.1017	5.36	1.15	45.9	6.56	6.32	0.910	0.889	45.9	6.48	194.0	5.55	3.97	45.1	6.63
1400JR300-54	9.2	14.00	3.00	0.75	0.0566	3.24	0.723	29.5	4.21	6.39	0.877	1.10	28.0	3.44	103.0	0.94	0.772	41.1	6.86
1400JR300-68	9.2	14.00	3.00	0.75	0.0713	4.05	0.900	36.7	5.24	6.38	1.08	1.09	35.5	4.41	132.0	1.89	1.53	50.8	6.85
1400JR300-97	9.2	14.00	3.00	0.75	0.1017	5.70	1.25	50.9	7.27	6.37	1.45	1.08	50.9	6.79	203.0	5.55	4.32	69.6	6.83
1400JT250-54	N/A	14.00	2.50	N/A	0.0566	3.42	1.01	23.2	3.51	4.80	0.291	0.537	23.2	3.22	46.6	3.95	1.08	6.72	6.01

*Gross section properties are listed for JoistRite Track-JT.

Application:

For selection of floor and roof joists subjected to uniform live and dead loads.

Notes:

- Applications involving multiple spans, cantilevers, concentrated loads, impact loading, etc., should be investigated separately.
- Web stiffeners are required at all support and concentrated load locations.
- Joists shall be restrained against rotation at each end. Joists shall be attached to track components or restrained by the installation of continuous solid blocking.
- Minimum end bearing shall be $1\frac{1}{2}$ ".
- Deflections and stresses were calculated without regard to the composite contribution of facing materials.
- The compression flange of the section should be braced by the attachment of continuous diaphragm-rated sheathing or decking. Additionally, mechanical bridging shall be installed at intervals not to exceed 7'-0" on center. The installation of bridging shall be completed before loading the floor/roof system.
- Calculations were based on the use of the net effective structural properties shown on page 3.
- Contact MarinoWare for uniform load capacities of framing components not shown in these tables.
- Full load capacity used in conjunction with WHI XXXX Fire Rated Assembly
- A 30% reduction in load capacity when used in conjunction with UL L580 Fire Rated Assembly.

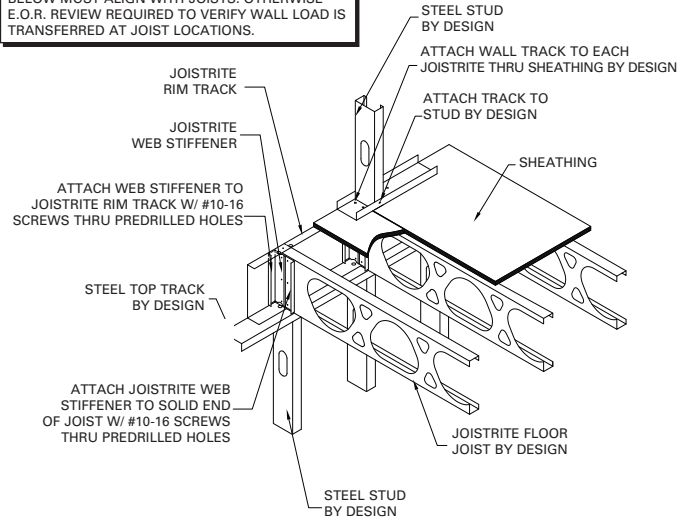
SECTION ID	15 psf Dead Load plus 40 psf Live Load						40 psf Dead Load plus 40 psf Live Load						15 psf Dead Load plus 60 psf Live Load					
	L/360			L/480			L/360			L/480			L/360			L/480		
	Single Span			Single Span			Single Span			Single Span			Single Span			Single Span		
	Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.		
	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24
800JR200-43	17.0	14.8	12.0	16.1	14.6	12.0	14.1	12.3	10.0	14.1	12.3	10.0	14.6	12.6	10.3	14.0	12.6	10.3
800JR200-54	19.0	17.3	15.1	17.3	15.7	13.7	17.3	15.7	13.7	17.3	15.7	13.7	16.6	15.1	13.2	15.1	13.7	12.0
800JR200-68	20.4	18.5	16.2	18.5	16.8	14.7	18.5	16.8	14.7	18.5	16.8	14.7	17.8	16.2	14.1	16.2	14.7	12.8
800JR200-97	22.6	20.5	17.9	20.5	18.7	16.3	20.6	18.7	16.3	20.6	18.7	16.3	19.7	17.9	15.7	17.9	16.3	14.2
800JR250-43	17.7	15.3	12.5	16.7	15.2	12.5	14.7	12.7	10.4	14.7	12.7	10.4	15.1	13.1	10.7	14.6	13.1	10.7
800JR250-54	19.8	18.0	15.7	18.0	16.3	14.3	18.0	16.3	13.9	18.0	16.3	13.9	17.3	15.7	13.7	15.7	14.3	12.5
800JR250-68	21.3	19.4	16.9	19.4	17.6	15.4	19.4	17.6	15.4	19.4	17.6	15.4	18.6	16.9	14.8	16.9	15.4	13.4
800JR250-97	23.7	21.5	18.8	21.5	19.5	17.1	21.5	19.6	17.1	21.5	19.6	17.1	20.7	18.8	16.4	18.8	17.1	14.9
800JR300-43	18.1	15.7	12.8	17.2	15.6	12.8	15.0	13.0	10.5	15.0	13.0	10.5	15.5	13.4	11.0	15.0	13.4	11.0
800JR300-54	20.2	18.4	16.1	18.4	16.7	14.6	18.4	16.7	14.0	18.4	16.7	14.0	17.7	16.1	14.0	16.1	14.6	12.7
800JR300-68	21.9	19.9	17.4	19.9	18.1	15.8	19.9	18.1	15.8	19.9	18.1	15.8	19.1	17.4	15.2	17.4	15.8	13.8
800JR300-97	24.7	22.4	19.6	22.4	20.4	17.8	22.4	20.4	17.8	22.4	20.4	17.8	21.5	19.6	17.1	19.6	17.8	15.5
1000JR200-54	22.4	20.3	17.8	20.3	18.5	16.2	20.4	18.5	15.7	20.4	18.5	15.7	19.6	17.8	15.5	17.8	16.2	14.1
1000JR200-68	24.0	21.8	19.1	21.8	19.8	17.3	21.9	19.9	17.3	21.9	19.9	17.3	21.0	19.1	16.7	19.1	17.3	15.1
1000JR200-97	26.7	24.2	21.2	24.2	22.0	19.2	24.3	22.0	19.3	24.3	22.0	19.3	23.3	21.2	18.5	21.2	19.2	16.8
1000JR250-54	23.3	21.1	18.5	21.1	19.2	16.8	21.2	19.2	15.9	21.2	19.2	15.9	20.3	18.5	16.1	18.5	16.8	14.7
1000JR250-68	25.1	22.8	19.9	22.8	20.7	18.1	22.8	20.7	17.9	22.8	20.7	17.9	21.9	19.9	17.4	19.9	18.1	15.8
1000JR250-97	27.9	25.4	22.1	25.4	23.0	20.1	25.4	23.1	20.1	25.4	23.1	20.1	24.4	22.1	19.3	22.1	20.1	17.6
1000JR300-54	23.8	21.6	18.9	21.6	19.6	17.2	21.6	19.6	16.0	21.6	19.6	16.0	20.8	18.9	16.5	18.9	17.2	15.0
1000JR300-68	25.8	23.4	20.5	23.4	21.3	18.6	23.4	21.3	18.2	23.4	21.3	18.2	22.5	20.5	17.9	20.5	18.6	16.2
1000JR300-97	29.0	26.4	23.0	26.4	24.0	20.9	26.4	24.0	20.9	26.4	24.0	20.9	25.4	23.0	20.1	23.0	20.9	18.3
1200JR200-54	25.7	23.3	20.0	23.3	21.2	18.5	23.3	20.7	13.8	23.3	20.7	13.8	22.4	20.4	14.7	20.4	18.5	14.7
1200JR200-68	27.6	25.0	21.9	25.0	22.8	19.9	25.1	22.8	19.9	25.1	22.8	19.9	24.1	21.9	19.1	21.9	19.9	17.4
1200JR200-97	30.6	27.8	24.3	27.8	25.3	22.1	27.8	25.3	22.1	27.8	25.3	22.1	26.8	24.3	21.2	24.3	22.1	19.3
1200JR250-54	26.7	24.2	20.0	24.2	22.0	19.2	24.2	20.7	13.8	24.2	20.7	13.8	23.3	21.2	14.7	21.2	19.2	14.7
1200JR250-68	28.7	26.1	22.8	26.1	23.7	20.7	26.1	23.7	20.1	26.1	23.7	20.1	25.1	22.8	19.9	22.8	20.7	18.1
1200JR250-97	32.0	29.0	25.4	29.0	26.4	23.0	29.1	26.4	23.1	29.1	26.4	23.1	27.9	25.4	22.2	25.4	23.0	20.1
1200JR300-54	27.2	24.7	20.0	24.7	22.5	19.6	24.7	20.7	13.8	24.7	20.7	13.8	23.8	21.6	14.7	21.6	19.6	14.7
1200JR300-68	29.5	26.8	23.4	26.8	24.3	21.3	26.8	24.3	20.3	26.8	24.3	20.3	25.7	23.4	20.4	23.4	21.3	18.6
1200JR300-97	33.2	30.2	26.3	30.2	27.4	23.9	30.2	27.4	24.0	30.2	27.4	24.0	29.0	26.3	23.0	26.3	23.9	20.9
1400JR200-68	31.9	29.0	25.3	29.0	26.3	23.0	29.0	26.3	23.0	29.0	26.3	23.0	27.9	25.3	22.1	25.3	23.0	20.1
1400JR200-97	35.5	32.3	28.2	32.3	29.3	25.6	32.3	29.3	25.6	32.3	29.3	25.6	31.0	28.2	24.6	28.2	25.6	22.4
1400JR250-68	33.1	30.1	26.3	30.1	27.3	23.9	30.1	27.3	23.1	30.1	27.3	23.1	28.9	26.3	22.9	26.3	23.9	20.8
1400JR250-97	36.9	33.5	29.3	33.5	30.4	26.6	33.5	30.5	26.6	33.5	30.5	26.6	32.2	29.3	25.6	29.3	26.6	23.2
1400JR300-68	33.8	30.8	26.9	30.8	27.9	24.4	30.8	27.9	23.4	30.8	27.9	23.4	29.6	26.9	23.5	26.9	24.4	21.3
1400JR300-97	38.2	34.7	30.3	34.7	31.5	27.5	34.7	31.5	27.5	34.7	31.5	27.5	33.3	30.3	26.5	30.3	27.5	24.0

Suggested Specifications: Joists

1. Joists shall be located directly over bearing studs or a load distribution member shall be provided to transfer loads.
2. Provide web stiffeners where necessary at reaction points and at points of concentrated loads.
3. Joists shall be installed with their web area perpendicular to the bearing surface.
4. Bridging, either steel strap or solid, shall be provided as shown in the shop drawings.
5. Provide additional joists under parallel partitions where the partition length exceeds half of the joist span.
6. Provide additional framing around all floor/roof openings that are larger than the joist spaces.
7. End blocking shall be provided where joist ends are not otherwise restrained from rotation.
8. Joist ends must be built solidly into masonry construction prior to placing any load on the joist.
9. All bridging, bracing, blocking, strapping, web reinforcement, etc., must be in place prior to loading of floors.
10. If the floor is to be of concrete, care must be exercised in its placement.
11. Care must be taken by all trades not to disturb joist placement, alignment, plumbness, etc., prior to the completion of the floor system.
12. Care must be taken not to overload the floor system during construction. Please place heavy loads, materials, equipment, etc., directly over structural supports, bearing walls or as directed by the architect or engineer.
13. Flat strap at top of joist location may be omitted, provided approved alternate sheathing or decking product is properly fastened.

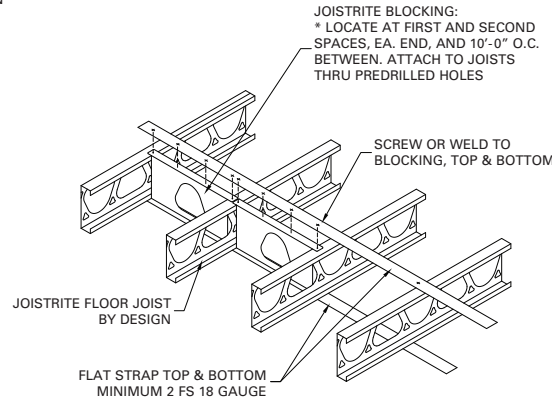
SECTION ID	40 psf Dead Load plus 60 psf Live Load						15 psf Dead Load plus 125 psf Live Load						40 psf Dead Load plus 125 psf Live Load					
	L/360			L/480			L/360			L/480			L/360			L/480		
	Single Span			Single Span			Single Span			Single Span			Single Span			Single Span		
	Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.			Joist Spacing (in.) o.c.		
	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24
800JR200-43	12.7	11.0	8.4	12.7	11.0	8.4	10.7	9.0	6.0	10.7	9.0	6.0	9.8	7.6	5.1	9.8	7.6	5.1
800JR200-54	16.0	14.6	12.3	15.1	13.7	12.0	13.0	11.8	10.3	11.8	10.7	9.4	13.0	11.7	9.5	11.8	10.7	9.4
800JR200-68	17.2	15.6	13.6	16.2	14.7	12.8	13.9	12.7	11.1	12.7	11.5	10.0	13.9	12.7	10.8	12.7	11.5	10.0
800JR200-97	19.1	17.3	15.1	18.0	16.3	14.2	15.5	14.0	12.3	14.0	12.8	11.1	15.5	14.0	12.3	14.0	12.8	11.1
800JR250-43	13.1	11.4	8.4	13.1	11.4	8.4	11.1	9.0	6.0	11.1	9.0	6.0	10.2	7.6	5.1	10.2	7.6	5.1
800JR250-54	16.7	15.2	12.4	15.7	14.3	12.4	13.5	12.3	10.5	12.3	11.2	9.8	13.5	11.8	9.7	12.3	11.2	9.7
800JR250-68	18.0	16.3	14.0	16.9	15.4	13.4	14.6	13.2	11.6	13.2	12.0	10.5	14.6	13.2	10.9	13.2	12.0	10.5
800JR250-97	20.0	18.2	15.9	18.8	17.1	14.9	16.2	14.7	12.9	14.7	13.4	11.7	16.2	14.7	12.9	14.7	13.4	11.7
800JR300-43	13.4	11.6	8.4	13.4	11.6	8.4	11.3	9.0	6.0	11.3	9.0	6.0	10.2	7.6	5.1	10.2	7.6	5.1
800JR300-54	17.1	15.4	12.6	16.1	14.6	12.6	13.8	12.6	10.6	12.6	11.4	10.0	13.8	12.0	9.8	12.6	11.4	9.8
800JR300-68	18.5	16.8	14.2	17.4	15.8	13.8	15.0	13.6	11.9	13.6	12.4	10.8	15.0	13.6	11.1	13.6	12.4	10.8
800JR300-97	20.8	18.9	16.5	19.6	17.8	15.5	16.9	15.3	13.4	15.3	13.9	12.2	16.9	15.3	13.4	15.3	13.9	12.2
1000JR200-54	18.9	17.2	13.3	17.8	16.2	13.3	15.3	13.9	9.5	13.9	12.6	9.5	15.3	12.1	8.1	13.9	12.1	8.1
1000JR200-68	20.3	18.4	15.9	19.1	17.3	15.2	16.4	14.9	13.0	14.9	13.6	11.9	16.4	14.9	12.4	14.9	13.6	11.9
1000JR200-97	22.5	20.5	17.9	21.2	19.3	16.8	18.3	16.6	14.5	16.6	15.1	13.2	18.3	16.6	14.5	16.6	15.1	13.2
1000JR250-54	19.6	17.4	13.3	18.5	16.8	13.3	15.9	14.2	9.5	14.5	13.1	9.5	15.6	12.1	8.1	14.5	12.1	8.1
1000JR250-68	21.2	19.2	16.0	19.9	18.1	15.8	17.2	15.6	13.5	15.6	14.2	12.4	17.2	15.3	12.5	15.6	14.2	12.4
1000JR250-97	23.6	21.4	18.7	22.2	20.1	17.6	19.1	17.3	15.1	17.3	15.8	13.8	19.1	17.3	15.1	17.3	15.8	13.8
1000JR300-54	20.1	17.6	13.3	18.9	17.2	13.3	16.3	14.2	9.5	14.8	13.4	9.5	15.8	12.1	8.1	14.8	12.1	8.1
1000JR300-68	21.7	19.8	16.3	20.5	18.6	16.2	17.6	16.0	13.7	16.0	14.6	12.7	17.6	15.5	12.7	16.0	14.6	12.7
1000JR300-97	24.5	22.3	19.4	23.1	20.9	18.3	19.9	18.0	15.8	18.0	16.4	14.3	19.9	18.0	15.8	18.0	16.4	14.3
1200JR200-54	21.7	16.5	11.0	20.4	16.5	11.0	15.7	11.8	7.9	15.7	11.8	7.9	13.4	10.0	6.7	13.4	10.0	6.7
1200JR200-68	23.3	21.1	17.9	21.9	19.9	17.4	18.9	17.1	15.0	17.1	15.6	13.6	18.9	17.0	13.4	17.1	15.6	13.4
1200JR200-97	25.8	23.5	20.5	24.3	22.1	19.3	20.9	19.0	16.6	19.0	17.3	15.1	20.9	19.0	16.3	19.0	17.3	15.1
1200JR250-54	22.0	16.5	11.0	21.2	16.5	11.0	15.7	11.8	7.9	15.7	11.8	7.9	13.4	10.0	6.7	13.4	10.0	6.7
1200JR250-68	24.2	22.0	17.9	22.8	20.7	17.9	19.7	17.9	15.2	17.9	16.2	14.2	19.7	17.1	13.4	17.9	16.2	13.4
1200JR250-97	27.0	24.5	21.4	25.4	23.1	20.1	21.9	19.9	17.4	19.9	18.0	15.8	21.9	19.9	17.2	19.9	18.0	15.8
1200JR300-54	22.0	16.5	11.0	21.6	16.5	11.0	15.7	11.8	7.9	15.7	11.8	7.9	13.4	10.0	6.7	13.4	10.0	6.7
1200JR300-68	24.9	22.3	18.2	23.4	21.3	18.2	20.2	18.3	15.4	18.3	16.6	14.5	20.0	17.3	13.4	18.3	16.6	13.4
1200JR300-97	28.0	25.5	22.2	26.4	24.0	20.9	22.7	20.6	18.0	20.6	18.7	16.4	22.7	20.6	17.7	20.6	18.7	16.4
1400JR200-68	26.9	24.5	18.9	25.3	23.0	18.9	21.8	19.8	13.5	19.8	18.0	13.5	21.8	17.2	11.5	19.8	17.2	11.5
1400JR200-97	30.0	27.2	23.8	28.2	25.6	22.4	24.3	22.1	19.3	22.1	20.1	17.5	24.3	22.1	18.8	22.1	20.1	17.5
1400JR250-68	27.9	25.3	18.9	26.3	23.9	18.9	22.6	20.3	13.5	20.6	18.7	13.5	22.6	17.2	11.5	20.6	17.2	11.5
1400JR250-97	31.1	28.3	24.7	29.3	26.6	23.2	25.2	22.9	20.0	22.9	20.8	18.2	25.2	22.9	19.8	22.9	20.8	18.2
1400JR300-68	28.6	25.7	18.9	26.9	24.4	18.9	23.2	20.3	13.5	21.0	19.1	13.5	22.9	17.2	11.5	21.0	17.2	11.5
1400JR300-97	32.2	29.2	25.6	30.3	27.5	24.0	26.1	23.7	20.7	23.7	21.5	18.8	26.1	23.7	20.2	23.7	21.5	18.8

NOTE:
LOAD-BEARING WALL FRAMING ABOVE AND BELOW MUST ALIGN WITH JOISTS. OTHERWISE E.O.R. REVIEW REQUIRED TO VERIFY WALL LOAD IS TRANSFERRED AT JOIST LOCATIONS.



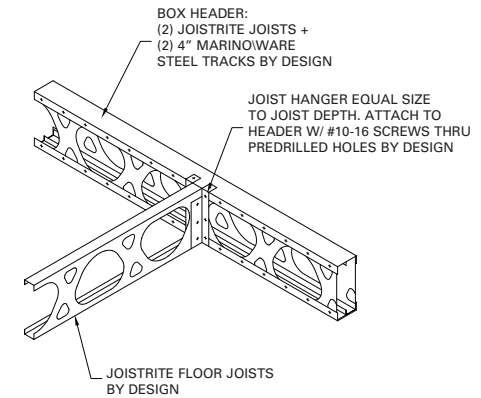
1. JOISTRITE BEARING ON STEEL STUD

NOTE:
TOP STRAP MAY BE ELIMINATED WITH THE PROPER ATTACHMENT OF DIAPHRAGM-RATED SHEATHING OR DECKING.



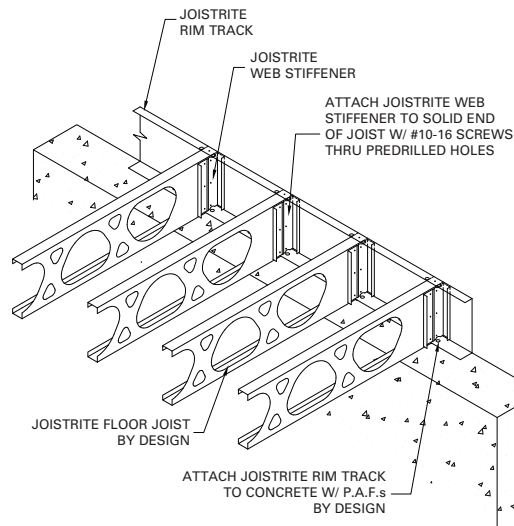
2. JOISTRITE BRIDGING AND BLOCKING

ENGINEER NOTE:
VERIFY CAPACITY OF CONNECTION.

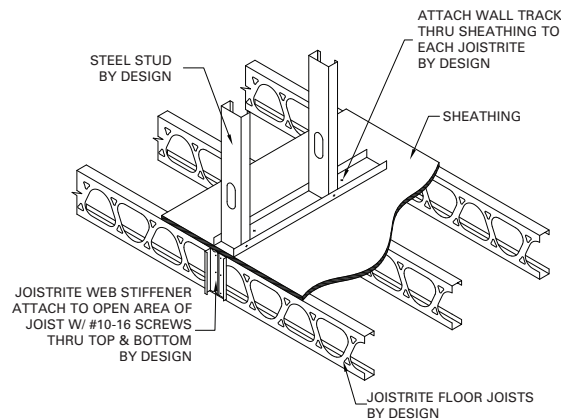


3. JOISTRITE TO HEADER DETAIL

NOTE:
LOAD-BEARING WALL FRAMING ABOVE AND BELOW MUST ALIGN WITH JOISTS. OTHERWISE E.O.R. REVIEW REQUIRED TO VERIFY WALL LOAD IS TRANSFERRED AT JOIST LOCATIONS.

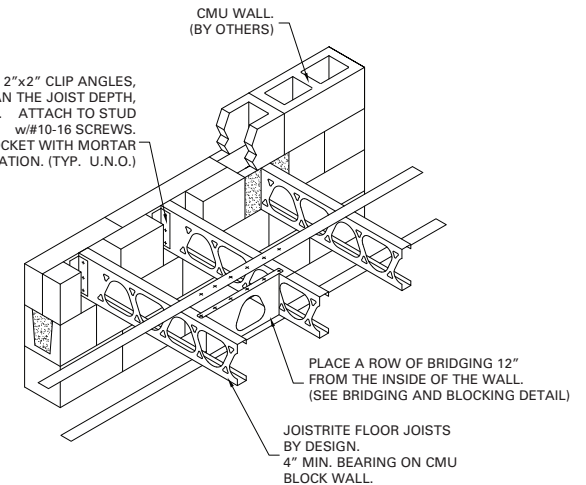


4. JOISTRITE BEARING ON MASONRY

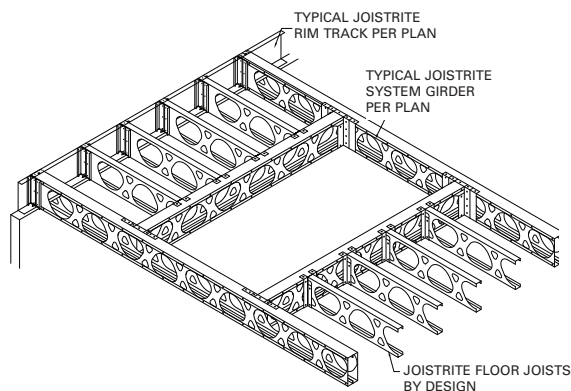


5. BEARING WALL ON JOISTRITE

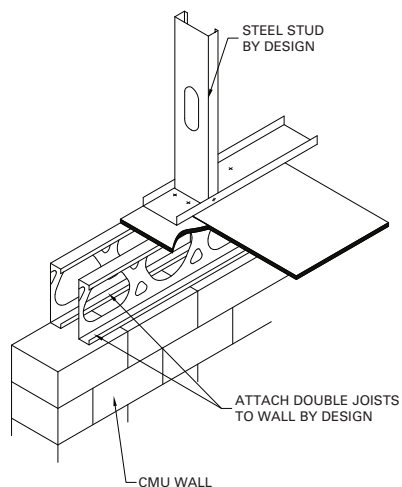
2"x2" CLIP ANGLES, 1/2" LESS THAN THE JOIST DEPTH, $F_y = 50\text{ksi}$. ATTACH TO STUD W/ #10-16 SCREWS. FILL POCKET WITH MORTAR AFTER INSTALLATION. (TYP. U.N.O.)



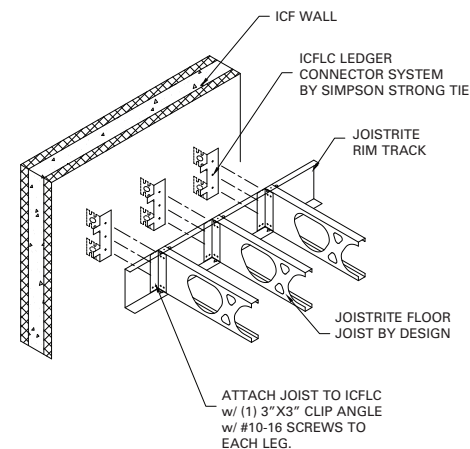
6. JOISTRITE BEARING ON POCKETED CMU



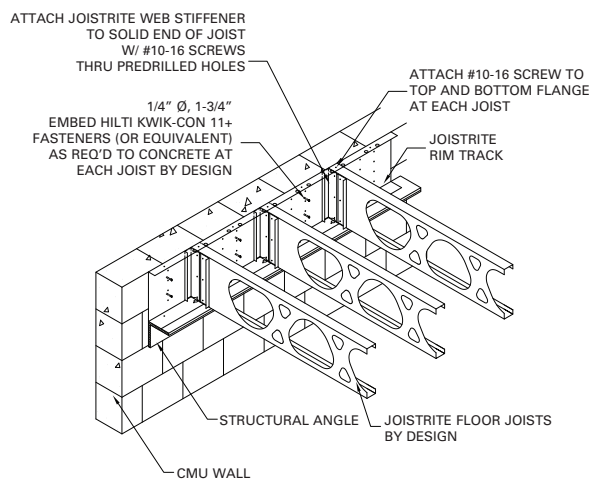
7. TYPICAL JOISTRITE FLOOR OPENING



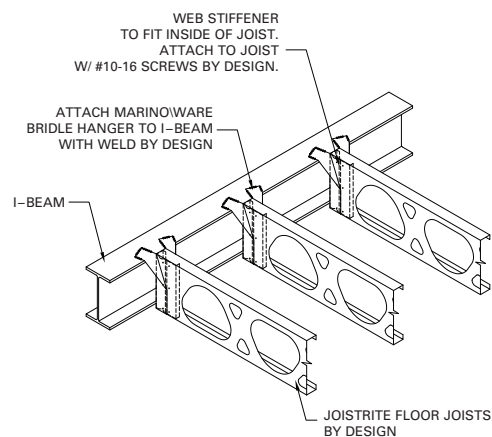
8. DOUBLE JOISTS AT EXTERIOR LOAD BEARING WALL



9. JOISTRITE CONNECTION TO ICF WALL



10. JOISTRITE CONNECTION TO CMU WALL



11. JOISTRITE CONNECTION TO I-BEAM



COMPLETE SYSTEM

JoistRite's uniquely engineered components offer many labor-saving advantages over competing products:

1. JoistRite Track

- **Preset spacing for joists** – built in “dimples,” located at conventional intervals along the track, surround the joist for easy initial placement.
- **Predrilled holes** – act as guides that assist in lining up components while eliminating the need to fasten screws through both joist and track.

2. JoistRite Track

- **Exclusive Snap-Lock technology** – allows joists to lock into place with little effort and with less labor.

3. JoistRite Web Stiffeners

- JoistRite web stiffeners are the very first to come with predrilled holes and precut to fit standard joist sizes, allowing for easier installation.

JoistRite Blocking

Unlike traditional blocking, JoistRite blocking comes equipped with unique tabs that eliminate the need for additional accessory clips and fasteners – and additional clamping or fastening. The product is also precut to fit between the joists, resulting in more stability based on less labor.

1.

2.

3.

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