

SPUTO AND LAMMERT ENGINEERING, LLC
STRUCTURAL ENGINEERS
10 SW 1ST AVENUE, GAINESVILLE, FL 32601
PHONE: 352-378-0448 FAX: 352-373-1331
E-MAIL: sputoandlammert@mindspring.com

PRODUCT EVALUATION REPORT

MANUFACTURER:

Kirby Building Systems
124 Kirby Drive
Portland, TN 37148

SUBJECT:

Cold-formed, through fastened, steel wall panels

PRODUCT CATEGORY:

Panel Walls: Siding

PRODUCT DESCRIPTION:

Through fastened, structural metal wall panel, applied over open framing.

1. KirbyWall (22, 24, and 26 gage only)
2. KRP (22, 24, and 26 gage only)
3. KirbyRib II (22, 24, and 26 gage only)

CODE CRITERIA:

Florida Building Code 2007:
Chapter 22: Steel
2209.1

REFERENCE STANDARDS:

AISI-NASPEC 2001 with 2004 Supplement

BASIS OF EVALUATION:

Structural load carrying capacity is based on rational analysis through the application of the AISI-NASPEC.

LIMITATIONS AND CONDITIONS OF USE FOR NON-HVHZ:

1. This compliance is not for HVHZ.
2. Maximum wall component pressures are per load tables.
3. The panel is to be installed over steel framing in accordance with the load tables and installation details.
4. Design engineer must evaluate the panel for web crippling and fastener pullout/pullover per AISI specification.
5. KRP and KirbyRib II panels may be used as a shear diaphragm. The use of other panels as a shear diaphragm is outside the scope of this product approval.
6. Impact resistance is not evaluated.

TECHNICAL DOCUMENTATION SUPPORTING COMPLIANCE STATEMENT:

1. Allowable Loading Table.
2. Installation drawings and details.
3. Diaphragm Table
4. Structural analysis of section.

CODE COMPLIANCE CERTIFICATION

As product evaluator, the undersigned certifies that the listed products are in compliance with the requirements of the 2007 Florida Building Code.

Sincerely,

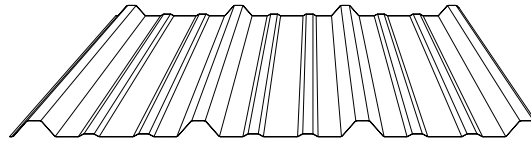
SPUTO AND LAMMERT ENGINEERING, LLC



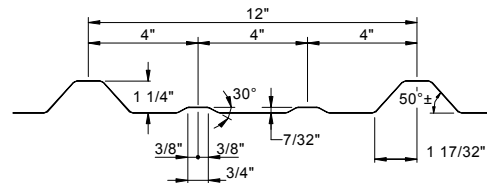
Thomas Sputo, Ph.D., P.E.
Florida PE 39142

DATE OF REPORT: 20 February 2009

I. KirbyRib II Panels



PANEL PROFILE



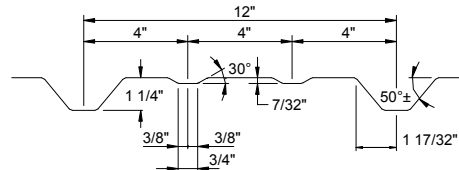
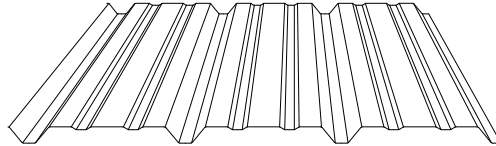
PARTIAL CROSS SECTION

Engineering Properties of Kirby Building Systems' KirbyRib II Panel																	
Designated Gage of Steel	Steel Yield (KSI)	Base Metal Thick. (In)	Total Thick. (In)	Panel Weight (Lbs/Ft ²)	Top In Compression						Bottom In Compression						Fy/1.67 (Ksi)
					Ix (In ⁴ /Ft)	Sx (In ³ /Ft)	Ma (K-IN)	Ix (In ⁴ /Ft)	Sx (In ³ /Ft)	Ma (K-IN)							
29 Gage	80	0.0137	0.0153	0.74	0.030	0.025	0.90	0.026	0.035	1.26	36						
26 Gage	80	0.0177	0.0193	0.94	0.043	0.037	1.33	0.035	0.046	1.66	36						
24 Gage	80	0.0225	0.0241	1.17	0.060	0.054	1.94	0.047	0.059	2.12	36						
22 Gage	50	0.0300	0.0316	1.53	0.083	0.085	2.55	0.070	0.081	2.43	30						

Gage of Panel	Number of Spans	Load Type	Maximum Total Uniform Load in PSF															
			L= 3'-0"		L= 3'-6"		L= 4'-0"		L= 4'-6"		L= 5'-0"		L= 6'-0"		L= 7'-0"		L= 7'-4"	
29 Ga.	1	POS	57	C	47	B+S	36	B+S	29	B+S	23	B+S	15	D	8	D	8	D
		NEG	-83	B+S	-63	B+S	-43	D	-30	D	-22	D	-13	D	-7	D	-7	D
	2	POS	54	C	46	C	40	C	36	C	31	B+S	22	B+S	15	B+S	16	B+S
		NEG	-49	P	-42	P	-35	B+S	-28	B+S	-23	B+S	-16	B+S	-11	B+S	-11	B+S
	3	POS	61	C	53	C	46	C	41	C	37	C	27	B+S	15	D	15	D
		NEG	-56	P	-48	P	-42	P	-35	B+S	-28	B+S	-20	B+S	-13	D	-13	D
	4	POS	59	C	51	C	44	C	39	C	35	C	26	B+S	16	D	16	D
		NEG	-54	P	-46	P	-40	P	-33	B+S	-37	B+S	-19	B+S	-13	B+S	-13	B+S
26 Ga.	1	POS	96	B+S	71	B+S	55	B+S	43	B+S	35	B+S	21	D	11	D	11	D
		NEG	-117	B+S	-86	D	-57	D	-40	D	-29	D	-17	D	-9	D	-10	D
	2	POS	87	C	75	C	66	C	53	B+S	44	B+S	30	B+S	20	B+S	21	B+S
		NEG	-64	P	-55	P	-48	P	-42	P	-35	B+S	-24	B+S	-16	B+S	-17	B+S
	3	POS	99	C	85	C	74	C	65	B+S	53	B+S	38	B+S	21	D	21	D
		NEG	-72	P	-62	P	-54	P	-48	P	-43	B+S	-30	B+S	-18	D	-18	D
	4	POS	96	C	82	C	72	C	61	B+S	50	B+S	35	B+S	23	D	23	D
		NEG	-70	P	-60	P	-52	P	-46	P	-41	B+S	-28	B+S	-19	D	-19	D
24 Ga.	1	POS	141	B+S	104	B+S	80	B+S	63	B+S	51	D	29	D	16	D	16	D
		NEG	-153	B+S	113	B+S	-77	D	-54	D	-39	D	-23	D	-13	D	-13	D
	2	POS	136	C	112	B+S	87	B+S	69	B+S	56	B+S	39	B+S	26	B+S	27	B+S
		NEG	-81	P	-69	P	-61	P	-54	P	-49	P	-36	B+S	-24	B+S	-24	B+S
	3	POS	155	C	133	C	107	B+S	87	B+S	69	B+S	48	B+S	30	D	30	D
		NEG	-92	P	-79	P	-69	P	-61	P	-55	P	-43	D	-24	D	-24	D
	4	POS	149	C	128	C	100	B+S	81	B+S	65	B+S	45	B+S	30	B+S	31	B+S
		NEG	-89	P	-76	P	-66	P	-59	P	-53	P	-42	B+S	-25	D	-26	D
22 Ga.	1	POS	186	B+S	137	B+S	105	B+S	83	B+S	68	B+S	40	D	22	D	22	D
		NEG	-177	B+S	-131	B+S	-100	B+S	-79	B+S	-59	D	-34	D	-19	D	-19	D
	2	POS	176	B+S	130	B+S	100	B+S	79	B+S	64	B+S	45	B+S	30	B+S	30	B+S
		NEG	-114	P	-98	P	-86	P	-76	P	-67	B+S	-47	B+S	-31	B+S	-31	B+S
	3	POS	217	B+S	161	B+S	124	B+S	98	B+S	80	B+S	56	B+S	37	B+S	38	B+S
		NEG	-130	P	-111	P	-98	P	-87	P	-78	P	-58	D	-35	D	-35	D
	4	POS	204	B+S	151	B+S	116	B+S	92	B+S	75	B+S	52	B+S	35	B+S	35	B+S
		NEG	-125	P	-107	P	-94	P	-83	P	-75	P	-55	B+S	-37	B+S	-37	B+S

- The panels were checked for bending (B), shear (S), combined bending and shear (B+S), deflection (D), web crippling (C) and panel pullover (P). The controlling check is noted in the table. Deflection was limited to span/150
- Section properties have been calculated in accordance with the 2001 North American Specification for the Design of Cold-Formed Steel Structural Members.
- Steel panels are either aluminum-zinc alloy or G-90 coated. The base metal thickness was used in determining section properties.
- Positive load (POS) is applied inward toward the panel supports and is applied to the outer surface of the panel cross-section. Negative load (NEG) is in the opposite direction
- The weight of the panel has not been deducted from the allowable loads.

III. KRP Panels



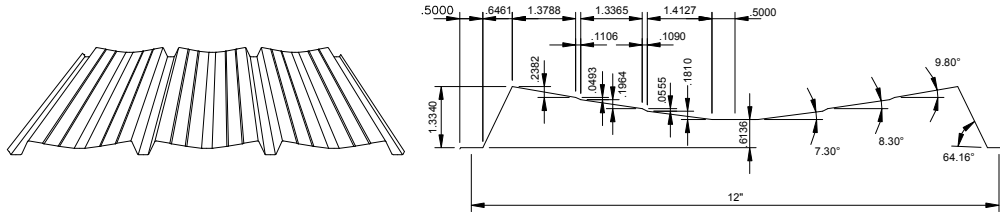
PANEL PROFILE

PARTIAL CROSS SECTION

Engineering Properties of Kirby Building Systems' KRP Panel																		
Designated Gage of Steel	Steel Yield (KSI)	Base Metal Thick. (In)	Total Thick. (In)	Panel Weight (Lbs/Ft ²)	Top In Compression			Bottom In Compression			Fy/1.67 (Ksi)							
					Ix (In ⁴ /Ft)	Sx (In ³ /Ft)	Ma (K-IN)	Ix (In ⁴ /Ft)	Sx (In ³ /Ft)	Ma (K-IN)								
29 Gage	80	0.0137	0.0153	0.74	0.026	0.035	1.26	0.030	0.025	0.90	36							
26 Gage	80	0.0177	0.0193	0.94	0.035	0.046	1.66	0.043	0.037	1.33	36							
24 Gage	80	0.0225	0.0241	1.17	0.047	0.059	2.12	0.060	0.054	1.94	36							
22 Gage	50	0.0300	0.0316	1.53	0.070	0.081	2.43	0.083	0.085	2.55	30							
Gage of Panel	Number of Spans	Load Type	Maximum Total Uniform Load in PSF															
			L= 3'-0"		L= 3'-6"		L= 4'-0"		L= 4'-6"		L= 5'-0"		L= 6'-0"		L= 7'-0"		L= 7'-4"	
29 Ga.	1	POS	57	C	49	C	43	C	37	D	27	D	16	D	10	D	9	D
		NEG	-63	B+S	-47	B+S	-36	B+S	-29	B+S	-23	B+S	-16	B+S	-11	D	-10	D
	2	POS	54	C	46	B+S	35	B+S	28	B+S	23	B+S	16	B+S	12	B+S	11	B+S
		NEG	-49	P	-42	P	-37	P	-33	P	-30	P	-22	B+S	-17	B+S	-15	B+S
	3	POS	61	C	53	C	43	B+S	35	B+S	28	B+S	20	B+S	15	B+S	14	B+S
		NEG	-56	P	-48	P	-42	P	-37	P	-34	P	-27	B+S	-20	B+S	-19	B+S
	4	POS	59	C	51	C	41	B+S	33	B+S	27	B+S	19	B+S	14	B+S	13	B+S
		NEG	-54	P	-46	P	-40	P	-36	P	-32	P	-26	B+S	-19	B+S	-17	B+S
26 Ga.	1	POS	103	C	87	B+S	67	B+S	50	D	37	D	21	D	13	D	12	D
		NEG	-96	B+S	-71	B+S	-55	B+S	-43	B+S	-35	B+S	-24	B+S	-16	D	-14	D
	2	POS	87	C	70	B+S	54	B+S	43	B+S	35	B+S	24	B+S	18	B+S	16	B+S
		NEG	-84	P	-55	P	-48	P	-42	P	-38	P	-30	B+S	-22	B+S	-20	B+S
	3	POS	99	C	85	C	67	B+S	53	B+S	43	B+S	30	B+S	22	B+S	20	B+S
		NEG	-72	P	-62	P	-54	P	-48	P	-43	P	-36	P	-28	B+S	-25	B+S
	4	POS	96	C	81	B+S	63	B+S	50	B+S	41	B+S	28	B+S	21	B+S	19	B+S
		NEG	-70	P	-60	P	-52	P	-46	P	-42	P	-35	P	-26	B+S	-24	B+S
24 Ga.	1	POS	153	B+S	113	B+S	87	B+S	68	D	49	D	29	D	18	D	16	D
		NEG	-141	B+S	-104	B+S	-80	B+S	-63	B+S	-51	B+S	-36	B+S	-23	D	-20	D
	2	POS	136	C	103	B+S	80	B+S	63	B+S	51	B+S	36	B+S	26	B+S	24	B+S
		NEG	-81	P	-69	P	-61	P	-54	P	-49	P	-39	B+S	-29	B+S	-26	B+S
	3	POS	155	C	128	B+S	99	B+S	78	B+S	64	B+S	44	B+S	33	B+S	30	D
		NEG	-92	P	-79	P	-69	P	-61	P	-55	P	-46	P	-36	B+S	-33	B+S
	4	POS	149	C	120	B+S	92	B+S	73	B+S	60	B+S	42	B+S	31	B+S	28	B+S
		NEG	-89	P	-76	P	-66	P	-59	P	-53	P	-44	P	-33	B+S	-30	B+S
22 Ga.	1	POS	177	B+S	131	B+S	100	B+S	79	B+S	64	B+S	42	D	27	D	23	D
		NEG	-186	B+S	-137	B+S	-105	B+S	-83	B+S	-68	B+S	-47	B+S	-32	D	-28	D
	2	POS	184	B+S	136	B+S	105	B+S	83	B+S	67	B+S	47	B+S	35	B+S	31	B+S
		NEG	-114	P	-98	P	-86	P	-76	P	-64	B+S	-45	B+S	-33	B+S	-30	B+S
	3	POS	220	C	169	B+S	130	B+S	103	B+S	84	B+S	58	B+S	43	B+S	39	B+S
		NEG	-130	P	-11	P	-98	P	-87	P	-78	P	-56	B+S	-41	B+S	-37	B+S
	4	POS	211	C	158	B+S	122	B+S	96	B+S	78	B+S	55	B+S	40	B+S	37	B+S
		NEG	-125	P	-107	P	-94	P	-83	P	-75	B+S	-52	B+S	-38	B+S	-35	B+S

- The panels were checked for bending (B), shear (S), combined bending and shear (B+S), deflection (D), web crippling (C) and panel pullover (P). The controlling check is noted in the table. Deflection was limited to span/120
- Section properties have been calculated in accordance with the 2001 North American Specification for the Design of Cold-Formed Steel Structural Members.
- Steel panels are either aluminum-zinc alloy or G-90 coated. The base metal thickness was used in determining section properties.
- Positive load (POS) is applied inward toward the panel supports and is applied to the outer surface of the panel cross-section. Negative load (NEG) is in the opposite direction
- The weight of the panel has not been deducted from the allowable loads.

II. KirbyWall Panels

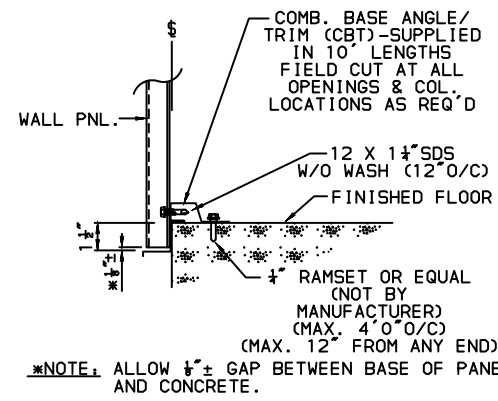


PANEL PROFILE

PARTIAL CROSS SECTION

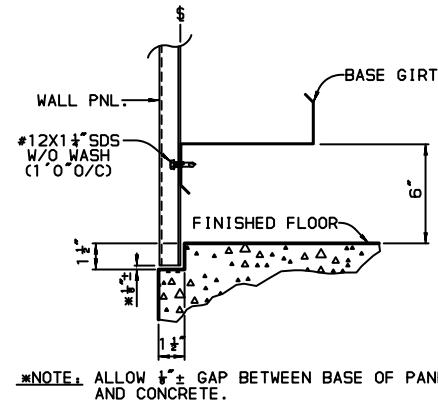
Engineering Properties of Kirby Building Systems' KirbyWall Panel																		
Designated Gage of Steel	Steel Yield (KSI)	Base Metal Thick. (In)	Total Thick. (In)	Panel Weight (Lbs/Ft ²)	Top In Compression			Bottom In Compression			Fy/1.67 (Ksi)							
					Ix (In ⁴ /Ft)	Sx (In ³ /Ft)	Ma (K-IN)	Ix (In ⁴ /Ft)	Sx (In ³ /Ft)	Ma (K-IN)								
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26 Gage	80	0.0177	0.0193	0.94	0.033	0.040	1.44	0.033	0.043	1.55	36							
24 Gage	80	0.0225	0.0241	1.17	0.043	0.053	1.91	0.043	0.056	2.02	36							
22 Gage	50	0.0300	0.0316	1.54	0.057	0.074	2.22	0.060	0.076	2.28	30							
Gage of Panel	Number of Spans	Load Type	Maximum Total Uniform Load in PSF															
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29 Ga.	1	POS	55	C	47	C	41	B+S	32	B+S	26	D	15	D	9	D	8	D
		NEG	-79	B+S	-59	B+S	-46	B+S	-35	D	-26	D	-15	D	-9	D	-8	D
	2	POS	50	C	43	C	38	C	34	C	29	B+S	21	B+S	15	B+S	14	B+S
		NEG	-56	P	-48	P	-40	B+S	-32	B+S	-26	B+S	-18	B+S	-13	B+S	-12	B+S
	3	POS	57	C	49	C	43	C	38	C	34	C	26	B+S	18	D	15	D
		NEG	-64	P	-55	P	-48	P	-39	B+S	-32	B+S	-23	B+S	-17	B+S	-15	B+S
	4	POS	55	C	47	C	41	C	37	C	33	C	24	B+S	18	D	16	D
		NEG	-61	P	-52	P	-46	B+S	-37	B+S	-30	B+S	-21	B+S	-16	B+S	-14	B+S
26 Ga.	1	POS	99	C	77	B+S	59	B+S	47	B+S	35	D	20	D	13	D	11	D
		NEG	-111	B+S	-82	B+S	-63	B+S	-47	D	-35	D	-20	D	-13	D	-11	D
	2	POS	82	C	70	C	61	C	50	B+S	40	B+S	28	B+S	21	B+S	19	B+S
		NEG	-73	P	-62	P	-54	P	-46	B+S	-38	B+S	-26	B+S	-19	B+S	-18	B+S
	3	POS	93	C	80	C	70	C	62	B+S	50	B+S	35	B+S	24	D	21	D
		NEG	-82	P	-71	P	-62	P	-55	P	-47	B+S	-33	B+S	-24	D	-21	D
	4	POS	89	C	77	C	67	C	58	B+S	47	B+S	33	B+S	24	B+S	22	B+S
		NEG	-79	P	-68	P	-59	P	-53	P	-44	B+S	-31	B+S	-23	B+S	-21	B+S
24 Ga.	1	POS	139	B+S	102	B+S	79	B+S	62	B+S	45	D	26	D	17	D	14	D
		NEG	-146	B+S	-108	B+S	-83	B+S	-62	D	-45	D	-26	D	-17	D	-14	D
	2	POS	128	C	107	B+S	82	B+S	65	B+S	53	B+S	37	B+S	27	B+S	25	B+S
		NEG	-92	P	-79	P	-69	P	-61	P	-50	B+S	-35	B+S	-26	B+S	-24	B+S
	3	POS	146	C	125	C	102	B+S	81	B+S	66	B+S	46	B+S	31	D	27	D
		NEG	-105	P	-90	P	-78	P	-70	P	-63	B+S	-44	B+S	-31	D	-27	D
	4	POS	140	C	120	C	96	B+S	76	B+S	62	B+S	43	B+S	32	B+S	29	D
		NEG	-101	P	-86	P	-75	P	-67	P	-59	B+S	-41	B+S	-30	B+S	-27	B+S
22 Ga.	1	POS	161	B+S	119	B+S	92	B+S	72	B+S	59	D	34	D	22	D	19	D
		NEG	-166	B+S	-122	B+S	-94	B+S	-74	B+S	-60	D	-36	D	-23	D	-20	D
	2	POS	164	B+S	121	B+S	93	B+S	74	B+S	60	B+S	42	B+S	31	B+S	28	B+S
		NEG	-123	P	-105	P	-91	B+S	-72	B+S	-59	B+S	-41	B+S	-30	B+S	-27	B+S
	3	POS	202	B+S	150	B+S	116	B+S	92	B+S	75	B+S	52	B+S	38	B+S	35	B+S
		NEG	-140	P	-120	P	-105	P	-90	B+S	-73	B+S	-51	B+S	-37	B+S	-34	B+S
	4	POS	190	B+S	141	B+S	109	B+S	86	B+S	70	B+S	49	B+S	36	B+S	33	B+S
		NEG	-134	P	-115	P	-101	P	-84	B+S	-68	B+S	-48	B+S	-35	B+S	-32	B+S

- The panels were checked for bending (B), shear (S), combined bending and shear (B+S), deflection (D), web crippling (C) and panel pullover (P). The controlling check is noted in the table. Deflection was limited to span/150
- Section properties have been calculated in accordance with the 2001 North American Specification for the Design of Cold-Formed Steel Structural Members.
- Steel panels are either aluminum-zinc alloy or G-90 coated. The base metal thickness was used in determining section properties.
- Positive load (POS) is applied inward toward the panel supports and is applied to the outer surface of the panel cross-section. Negative load (NEG) is in the opposite direction
- The weight of the panel has not been deducted from the allowable loads.



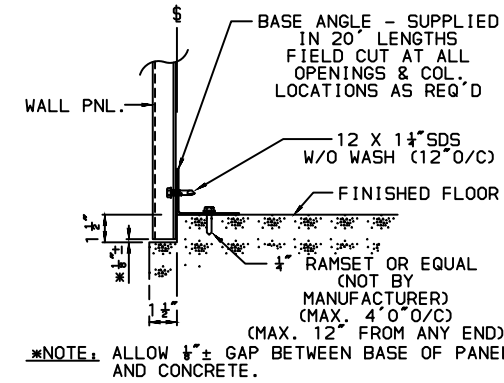
PL127

BASE CONDITION W/ COMBINATION BASE ANGLE



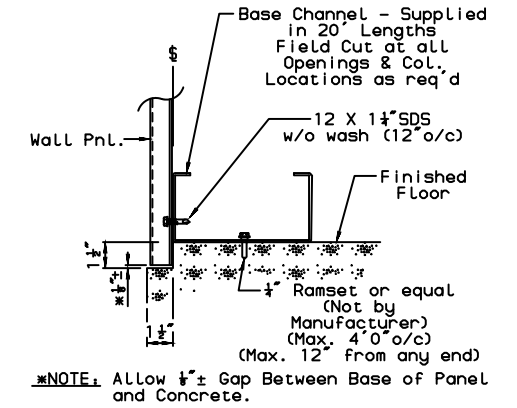
PL129

BASE CONDITION WITH BASE GIRT



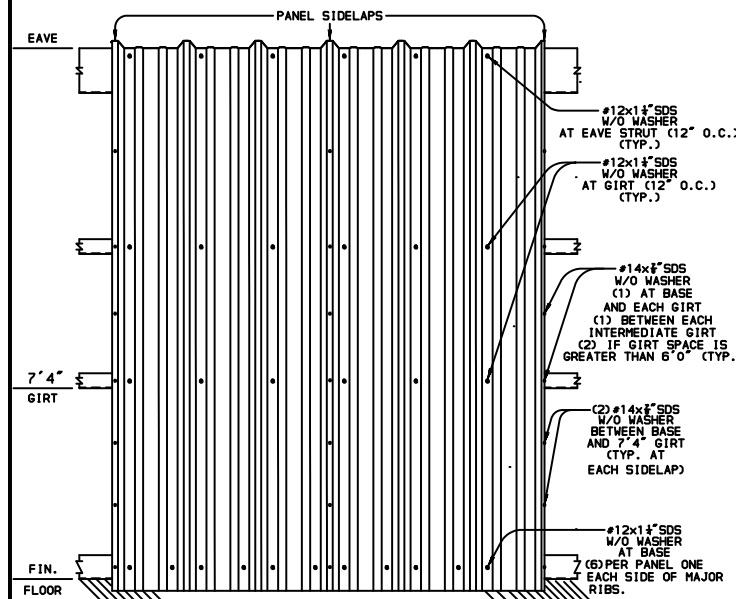
PL130

BASE CONDITION WITH BASE ANGLE



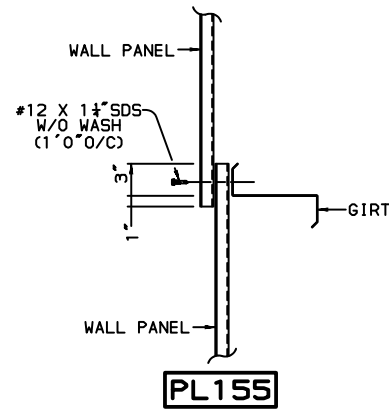
PL131

BASE CONDITION WITH BASE CHANNEL



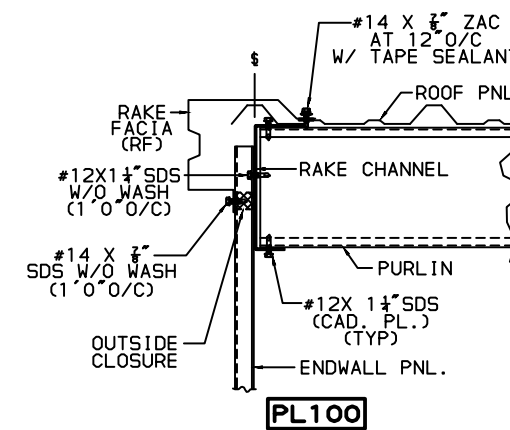
PL149

KIRBY RIB II WALL PANEL FASTENER LAYOUT



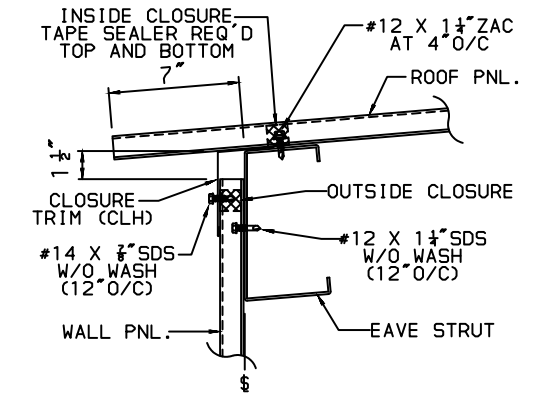
PL155

TYPICAL WALL PANEL LAP



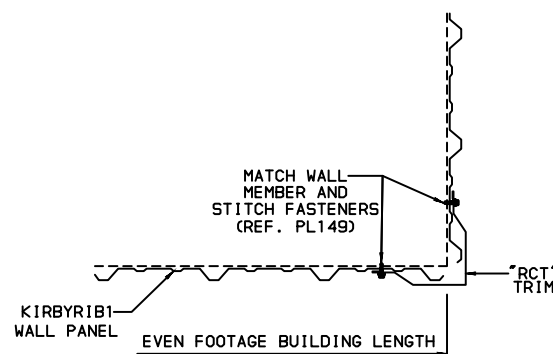
PL100

STANDARD RAKE CONDITION



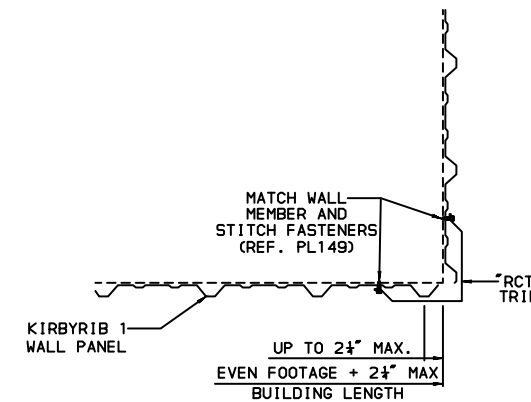
PL104

CONDITION AT EAVE WITHOUT GUTTER OR EAVE FASCIA



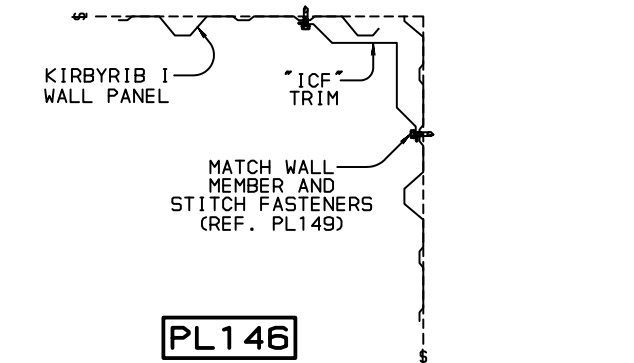
PL143

KIRBY RIB II CORNER TRIM DETAIL



PL144

KIRBY RIB II CORNER TRIM DETAIL



PL146

INSIDE CORNER TRIM WITH KIRBY RIB II

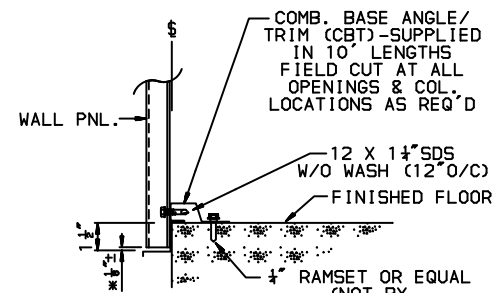
NO.	REVISIONS	MADE	CHECKED	DATE	ENGR	DATE	NO.	REVISIONS	MADE	CHECKED	DATE	ENGR	DATE

SCALE:	NONE	DATE
DRAWN BY:	JED	1-7-05
CK'D BY:	RE	1-12-05
DSGN APP BY:		

KIRBY RIB II WALL PANEL
BASIC ERECTION
(KRII)



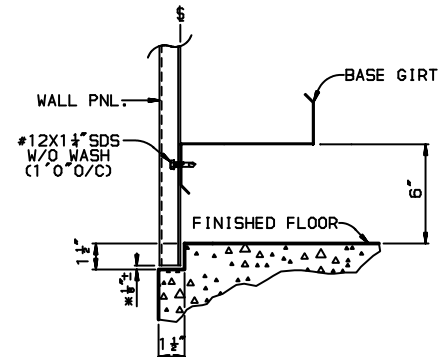
DRAWING NUMBER	KRW-1.0	REV. NO.	0
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NOTE: ALLOW 1/8\"/>

PL127

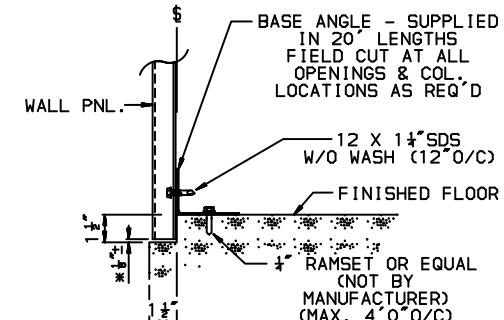
BASE CONDITION W/ COMBINATION BASE ANGLE



NOTE: ALLOW 1/8\"/>

PL129

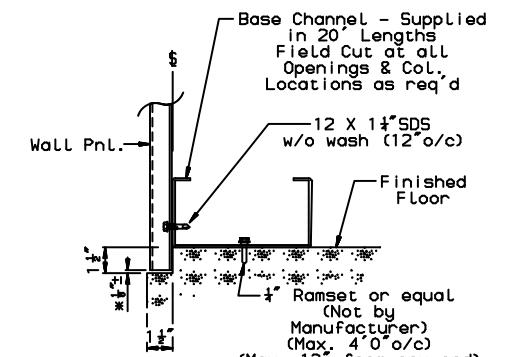
BASE CONDITION WITH BASE GIRTS



NOTE: ALLOW 1/8\"/>

PL130

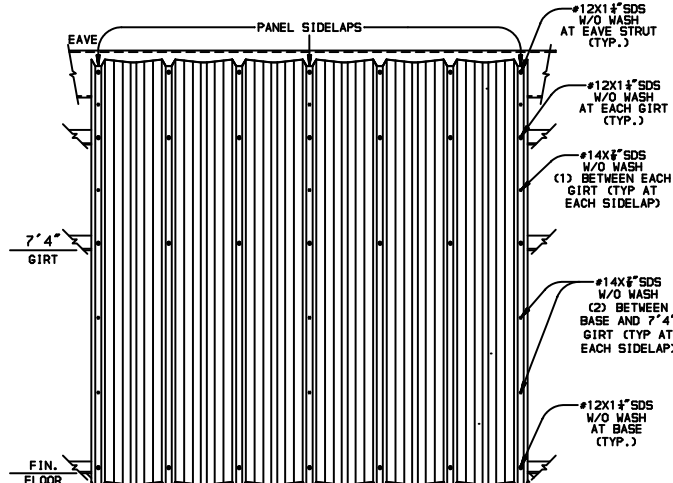
BASE CONDITION WITH BASE ANGLE



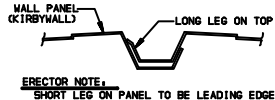
NOTE: Allow 1/8\"/>

PL131

BASE CONDITION WITH BASE CHANNEL

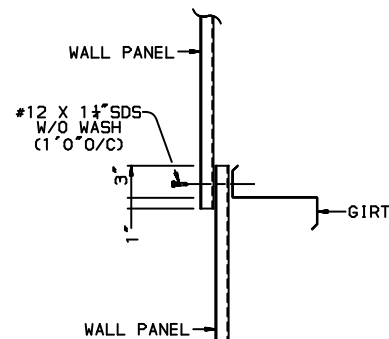


- GENERAL NOTES:**
1. BLOCK GIRTS TO "LEVEL" POSITION BEFORE STARTING PANEL ERECTION. MAINTAIN BLOCKING UNTIL PANEL TO STRUCTURAL FASTENERS ARE INSTALLED.
 2. ALIGN AND PLUMB FIRST WALL PANEL WITH ROOF PANEL.
 3. TO PREVENT "OIL-CANNING", ALL PANEL FASTENERS SHOULD START FROM BASE ANGLE AND SECURED TO EACH STRUCTURAL GIRTS TOWARD EAVE.
 4. THERE IS A PLUS OR MINUS TOLERANCE BUILT INTO THE KIRBY WALL PANEL. MEASURE AND MARK 36\"/>



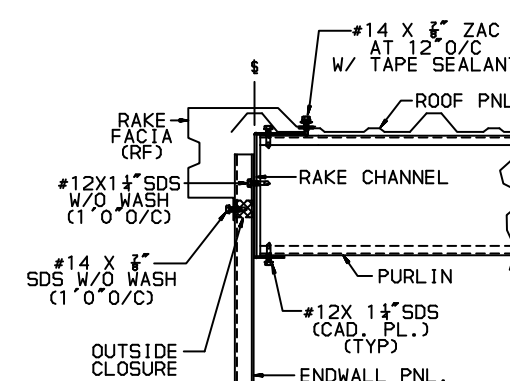
PL153

KIRBY WALL PANEL FASTENER LAYOUT



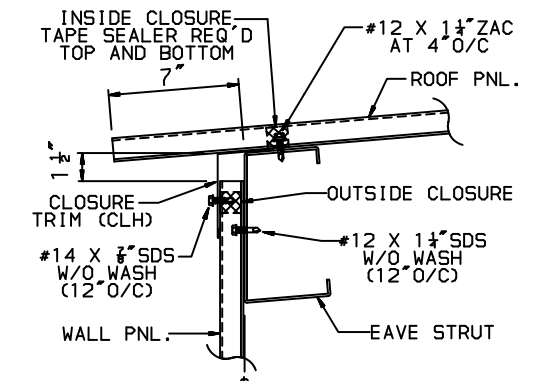
PL155

TYPICAL WALL PANEL LAP



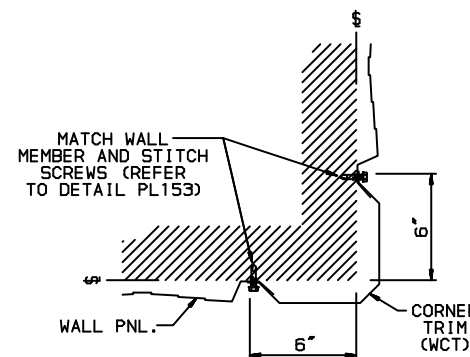
PL100

STANDARD RAKE CONDITION



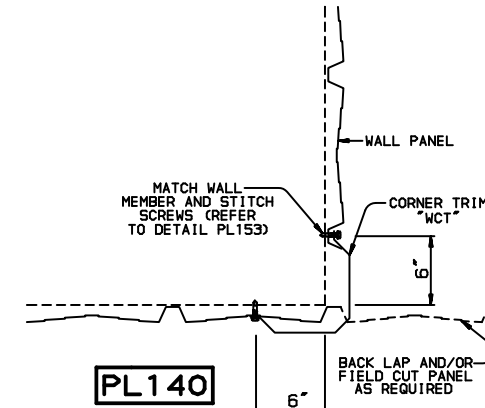
PL104

CONDITION AT EAVE WITHOUT GUTTER OR EAVE FASCIA



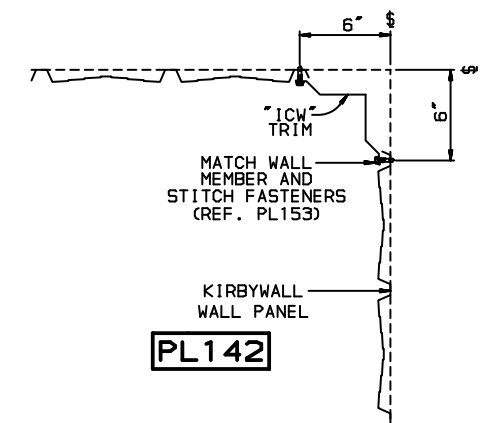
PL139

KIRBY WALL CORNER TRIM DETAIL



PL140

KIRBY WALL CORNER TRIM DETAIL



PL142

INSIDE CORNER TRIM WITH KIRBY WALL

NO.	REVISIONS	MADE	CHECKED	DATE	ENGR	DATE	NO.	REVISIONS	MADE	CHECKED	DATE	ENGR	DATE	SCALE:	NONE	DATE

"KIRBY WALL" WALL PANEL
BASIC ERECTION
(KW)



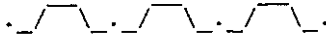
DRAWING NUMBER: KWW-1.0
REV. NO.: 0

Kirby Rib II Wall Panel

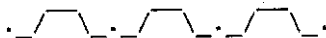
Magnatrax
Eufaula, AL

Date: 5/16/2005
Time: 12:19:17 PM

INTERIOR PANEL FASTENERS



END PANEL FASTENERS



METHOD: SDI INSULATION: NO DOUBLE EDGE FASTENERS: NO

PANEL

PANEL WIDTH	=	36.00	IN	RIB PITCH	=	12.00	IN
BASE METAL THICKNESS	=	0.0177	IN	RIB HEIGHT	=	1.25	IN
PANEL LENGTH	=	11.8	FT	RIB WIDTH	=	1.00	IN
MOMENT OF INERTIA X	=	0.036	IN ⁴ /FT	PAN WIDTH	=	8.90	IN
MODULUS OF ELASTICITY	=	29500	KSI	WEB WIDTH	=	1.63	IN
STEEL YIELD STRENGTH	=	60.0	KSI	WEB ANGLE	=	50	DEG
STEEL ULTIMATE STRENGTH	=	N/A					

DIAPHRAGM

NUMBER OF PURLINS	=	1	STRUCTURAL FASTENERS	Screws
NUMBER OF STITCH FASTENERS	=	7	STITCH FASTENERS	#14 Screws
STITCH FASTENER SPACING	=	24 IN		
NUMBER OF EDGE FASTENERS	=	0		

END FASTENERS (DISTANCES FROM CENTER LINE OF PANEL) (IN)
3.75, 3.75, 8.25, 8.25, 15.75, 15.75

INTERIOR FASTENERS (DISTANCES FROM CENTER LINE OF PANEL) (IN)
3.75, 8.25, 15.75

STRUCTURAL FASTENER STRENGTH	=	0.929	KIPS
STITCH FASTENER STRENGTH	=	0.504	KIPS
STRUCTURAL FASTENER FLEXIBILITY	=	0.0098	IN/KIP
STITCH FASTENER FLEXIBILITY	=	0.0225	IN/KIP

DIAPHRAGM STRENGTH AND STIFFNESS

WARPING FACTOR	=	417	EDGE FASTENER SHEAR	=	0.303	KIPS/FT
SLIP COEFFICIENT	=	4.06	INTERIOR FASTENER SHEAR	=	0.462	KIPS/FT
FACTOR OF SAFETY	=	2.00	CORNER FASTENER SHEAR	=	0.474	KIPS/FT
			BUCKLING SHEAR	=	0.364	KIPS/FT

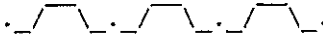
DIAPHRAGM STIFFNESS	=	53.02	KIPS/IN
DIAPHRAGM SHEAR	=	0.151	KIPS/FT
DIAPHRAGM STRENGTH	=	1.791	KIPS

KRP Wall Panel

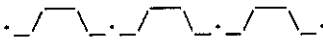
Magnatrax
Eufaula, AL

Date: 5/16/2005
Time: 12:25:06 PM

INTERIOR PANEL FASTENERS



END PANEL FASTENERS



METHOD: SDI

INSULATION: NO

DOUBLE EDGE FASTENERS: NO

PANEL

PANEL WIDTH	=	36.00	IN	RIB PITCH	=	12.00	IN
BASE METAL THICKNESS	=	0.0177	IN	RIB HEIGHT	=	1.25	IN
PANEL LENGTH	=	11.8	FT	RIB WIDTH	=	8.90	IN
MOMENT OF INERTIA X	=	0.036	IN ⁴ /FT	PAN WIDTH	=	1.00	IN
MODULUS OF ELASTICITY	=	29500	KSI	WEB WIDTH	=	1.63	IN
STEEL YIELD STRENGTH	=	60.0	KSI	WEB ANGLE	=	50	DEG
STEEL ULTIMATE STRENGTH	=	N/A					

DIAPHRAGM

NUMBER OF PURLINS	=	1	STRUCTURAL FASTENERS	Screws
NUMBER OF STITCH FASTENERS	=	7	STITCH FASTENERS	#14 Screws
STITCH FASTENER SPACING	=	24 IN		
NUMBER OF EDGE FASTENERS	=	0		

END FASTENERS (DISTANCES FROM CENTER LINE OF PANEL) (IN)
6, 6, 18, 18

INTERIOR FASTENERS (DISTANCES FROM CENTER LINE OF PANEL) (IN)
6.0, 6.0, 18., 18.0

STRUCTURAL FASTENER STRENGTH	=	0.929	KIPS
STITCH FASTENER STRENGTH	=	0.504	KIPS
STRUCTURAL FASTENER FLEXIBILITY	=	0.0098	IN/KIP
STITCH FASTENER FLEXIBILITY	=	0.0225	IN/KIP

DIAPHRAGM STRENGTH AND STIFFNESS

WARPING FACTOR	=	7827	EDGE FASTENER SHEAR	=	0.314	KIPS/FT
SLIP COEFFICIENT	=	4.00	INTERIOR FASTENER SHEAR	=	0.524	KIPS/FT
FACTOR OF SAFETY	=	2.00	CORNER FASTENER SHEAR	=	0.480	KIPS/FT
			BUCKLING SHEAR	=	0.364	KIPS/FT

DIAPHRAGM STIFFNESS	=	8.43	KIPS/IN
DIAPHRAGM SHEAR	=	0.157	KIPS/FT
DIAPHRAGM STRENGTH	=	1.859	KIPS