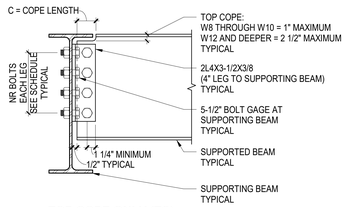
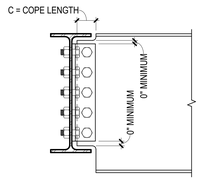
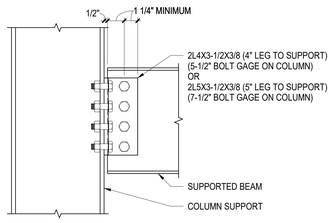


A TOP COPE ONLY (TC)



B TOP AND BOTTOM COPE (TBC)
SEE NOTE 3



C BEAM TO COLUMN FLANGE (NO COPE)

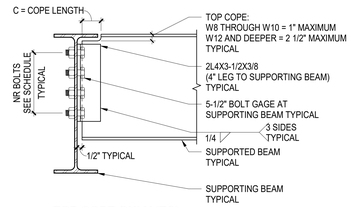
TYPE 2L1 DOUBLE ANGLE SHEAR CONNECTION SCHEDULE:
3/4" DIAMETER ASTM F3125-N BOLTS GRADES A325 OR F1852

BEAM SIZE		NR BOLTS	CONNECTION CAPACITY (KIPS) NO COPE	C = 4" TC	C = 4" TBC	C = 6" TC	C = 6" TBC	C = 8" TC	C = 8" TBC
W8	x10	2	25	20	9	14	6	11	4
	x13-24	2	34	27	13	19	9	14	7
	x28+	2	43	37	16	26	11	20	9
W10	x12	2	28	28	11	24	7	19	5
	x15-26	2	34	34	13	30	9	23	7
	x30+	2	44	44	17	44	12	37	9
W12	x14-16	2	30	30	11	28	8	20	6
		3	48	40	25	28	16	20	11
	x19-30	2	35	35	13	35	9	28	7
		3	56	49	30	37	20	28	14
	x35+	2	44	44	17	44	12	41	9
		3	66	65	38	54	27	41	20
W14	x22-30	3	55	53	29	49	19	37	14
	x34-48	3	66	66	36	66	26	51	19
	x53+	3	66	66	47	66	33	66	26
W16	x26-31	3	59	58	32	58	22	54	16
		4	81	71	57	71	37	54	26
	x36-40	3	70	68	38	68	27	68	20
		4	96	85	67	85	47	70	33
	x45+	3	82	80	44	80	31	80	24
		4	112	101	78	101	55	85	42
W18	x35-50	3	71	69	38	69	27	69	20
		4	98	88	68	88	48	88	34
		5	124	95	93	95	73	88	52
	x55+	3	92	90	50	90	35	90	27
		4	123	115	89	115	62	115	48
		5	154	128	121	128	98	126	75
W21	x44-63	4	114	103	80	103	56	103	43
		5	145	125	109	125	88	125	64
		6	175	133	131	133	126	133	91
	x68+	4	123	123	98	123	69	123	53
		5	154	153	134	153	108	153	83
		6	184	168	160	168	155	168	119
W24 - 4 MIN		4	123	116	90	116	63	116	49
W27, W30 - 5 MIN		5	154	141	123	141	99	141	76
W33-W40 - 7 MIN		6	184	165	147	165	142	165	108
		7	215	215	200	215	200	215	174
		8	246	246	234	246	234	246	232
		9	276	276	276	276	276	276	276
		10	307	307	307	307	307	307	307

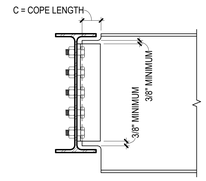
NOTES:

1. SEE TYPICAL ANGLE SHEAR CONNECTION GENERAL NOTES FOR ADDITIONAL INFORMATION
2. SELECT CONNECTION CAPACITY BASED ON COPED CONDITION OF BEAM
3. TBC VALUES IN TABLE ALSO APPLY TO BOTTOM COPE ONLY CONDITION
4. SSLT HOLES IN ANGLE LEG TO SUPPORT
5. MINIMUM COLUMN FLANGE WIDTH SHALL BE 8" (INCLUDES: W10x33+, W12x40+, W14x43+)

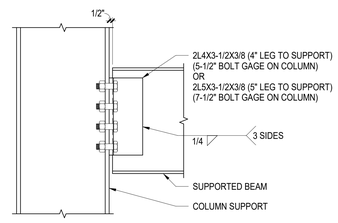
1 TYPICAL DOUBLE ANGLE SHEAR CONNECTION AT BEAM OR COLUMN FLANGE (TYPE 2L1) - BOLTED-BOLTED
NOT TO SCALE



A TOP COPE ONLY (TC)



B TOP AND BOTTOM COPE (TBC)
SEE NOTE 3



C BEAM TO COLUMN FLANGE (NO COPE)

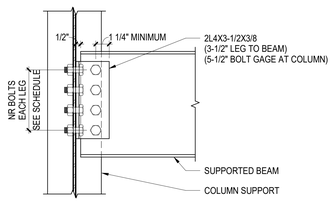
TYPE 2L2 DOUBLE ANGLE SHEAR CONNECTION SCHEDULE:
3/4" DIAMETER ASTM F3125-N BOLTS GRADES A325 OR F1852

BEAM SIZE		NR BOLTS	CONNECTION CAPACITY (KIPS) NO COPE	C = 4" TC	C = 4" TBC	C = 6" TC	C = 6" TBC	C = 8" TC	C = 8" TBC
W8	x10	2	44	20	9	14	6	11	4
	x13-24	2	44	27	13	19	9	14	7
	x28+	2	44	37	16	26	11	20	9
W10	x12	2	44	34	11	24	7	19	5
	x15-26	2	44	43	13	30	9	23	7
	x30+	2	44	44	17	44	12	37	9
W12	x14-16	2	44	40	11	28	8	20	6
		3	66	40	25	28	16	20	11
	x19-30	2	44	44	13	37	9	28	7
		3	66	52	30	37	20	28	14
	x35+	2	44	44	17	44	12	41	9
		3	66	66	38	54	27	41	20
W14	x22-30	3	66	66	29	49	19	37	14
	x34-48	3	66	66	36	66	26	51	19
	x53+	3	66	66	47	66	33	66	26
W16	x26-31	3	92	92	32	72	22	54	16
		4	123	99	57	72	37	54	26
	x36-40	3	92	92	38	91	27	70	20
		4	123	119	67	91	47	70	33
	x45+	3	92	92	44	92	31	85	24
		4	123	123	78	111	55	85	42
W18	x35-50	3	92	92	38	92	27	88	20
		4	123	123	68	114	48	88	34
		5	154	137	107	114	73	88	52
	x55+	3	92	92	50	92	35	92	27
		4	123	123	89	123	62	123	48
		5	154	154	139	154	98	126	75
W21	x44-63	4	123	123	80	123	56	123	43
		5	154	154	124	154	88	143	64
		6	184	184	179	184	126	143	91
	x68+	4	123	123	98	123	69	123	53
		5	154	154	153	154	108	154	83
		6	184	184	184	184	155	184	119
W24 - 4 MIN		4	123	123	90	123	63	123	49
W27, W30 - 5 MIN		5	154	154	140	154	99	154	76
W33-W40 - 7 MIN		6	184	184	184	184	142	184	108
		7	215	215	215	215	215	215	174
		8	246	246	246	246	246	246	232
		9	276	276	276	276	276	276	276
		10	307	307	307	307	307	307	307

NOTES:

1. SEE TYPICAL ANGLE SHEAR CONNECTION GENERAL NOTES FOR ADDITIONAL INFORMATION
2. SELECT CONNECTION CAPACITY BASED ON COPED CONDITION OF BEAM
3. TBC VALUES IN TABLE ALSO APPLY TO BOTTOM COPE ONLY CONDITION
4. SSLT HOLES IN ANGLE LEG TO SUPPORT
5. MINIMUM COLUMN FLANGE WIDTH SHALL BE 8" (INCLUDES: W10x33+, W12x40+, W14x43+)

2 TYPICAL DOUBLE ANGLE SHEAR CONNECTION AT BEAM OR COLUMN FLANGE (TYPE 2L2) - BOLTED-WELDED
NOT TO SCALE



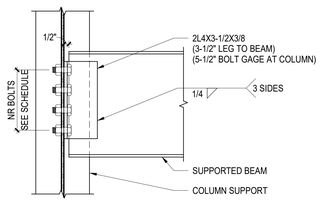
TYPE 2L3 DOUBLE ANGLE SHEAR CONNECTION SCHEDULE:
3/4" DIAMETER ASTM F3125-N BOLTS GRADES A325 OR F1852

BEAM SIZE	NR BOLTS	CONNECTION CAPACITY (KIPS)
W8 - W12	2	25
W12	3	48
W14 - W18	3	55
W16 - W24	4	81
W18 - W30	5	124
W21 - W40	6	153
W27 - W44	7	178
W30 - W44	8	204
W33 - W44	9	229
W36 - W44	10	254

NOTES:

1. SEE TYPICAL ANGLE SHEAR CONNECTION GENERAL NOTES FOR ADDITIONAL INFORMATION
2. SSLT HOLES IN ANGLE LEG TO COLUMN SUPPORT
3. PROVIDE ERECTION SEAT PER FABRICATOR WHEN SAME DEPTH CONNECTION IS REQUIRED ON BOTH SIDES AND BOLT STAGGERING IS NOT POSSIBLE
4. MINIMUM COLUMN WEB THICKNESS SHALL BE 0.29" (INCLUDES: W8x31+, W10x33+, W12x40+, W14x43+)

3 TYPICAL DOUBLE ANGLE SHEAR CONNECTION AT COLUMN WEB (TYPE 2L3) - BOLTED-BOLTED
NOT TO SCALE



TYPE 2L4 DOUBLE ANGLE SHEAR CONNECTION SCHEDULE:
3/4" DIAMETER ASTM F3125-N BOLTS GRADES A325 OR F1852

BEAM SIZE	NR BOLTS	CONNECTION CAPACITY (KIPS)
W8 - W12	2	45
W12	3	76
W14 - W18	3	76
W16 - W24	4	102
W18 - W30	5	127
W21 - W40	6	153
W27 - W44	7	178
W30 - W44	8	204
W33 - W44	9	229
W36 - W44	10	254

NOTES:

1. SEE TYPICAL ANGLE SHEAR CONNECTION GENERAL NOTES FOR ADDITIONAL INFORMATION
2. SSLT HOLES IN ANGLE LEG TO COLUMN SUPPORT
3. PROVIDE ERECTION SEAT PER FABRICATOR WHEN SAME DEPTH CONNECTION IS REQUIRED ON BOTH SIDES AND BOLT STAGGERING IS NOT POSSIBLE
4. MINIMUM COLUMN WEB THICKNESS SHALL BE 0.29" (INCLUDES: W8x31+, W10x33+, W12x40+, W14x43+)

4 TYPICAL DOUBLE ANGLE SHEAR CONNECTION AT COLUMN WEB (TYPE 2L4) - BOLTED-WELDED
NOT TO SCALE

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Building #17
Campus Expansion Child Day-care Center

777 Old Saw Mill River Road
Mount Pleasant, NY 10591

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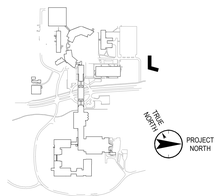
Key Plan



No.	Date	Description
	05.20.2022	ISSUED FOR PERMIT
	06.20.2022	100% CONSTRUCTION DOCUMENTS
	07.01.2022	100% CONSTRUCTION DOCUMENT- 1

Plot Date: 08/07/20

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Vendor Name: GENSLER
Vendor Project No.: 006.3608.000
Discipline: Drawn By: Author

TYPICAL STEEL BEAM SHEAR CONNECTIONS 3/4" DIAMETER BOLTS

Scale: NOT TO SCALE Floor:

S-512

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