



DESIGN • ENGINEERING • FABRICATION • INSTALLATION



CORESLAB[®]
STRUCTURES
(ATLANTA) INC.

P.O. Box 246,
1655 Noah's Ark Road, Jonesboro, Georgia 30236
(770) 471-1150 FAX (770) 477-2838

Coreslab Structures (Atlanta) Inc.

About

Coreslab Structures (Atlanta) Inc. is a wholly owned subsidiary of Coreslab International Inc. solely dedicated to the prestressed/precast industry. As a small regional company, we are able to offer personal service for your project while we have access to the resources and financial strength of the largest prestressed products company in the country.

Coreslab was founded in 1975, by four precast entrepreneurs, who went on to expand Coreslab into a company with employees throughout the United States and Canada. The Atlanta division opened its doors in 1973 as a hollow core producer to serve the Southeast and was acquired by Coreslab International in late 1993. Since 1993, Coreslab Structures (Atlanta) Inc. has supplied millions of square feet of hollow core plank.

Coreslab Structures (Atlanta) Inc. is a full-service design, manufacturing, and installation company that specializes in hollow core floor systems primarily used in schools, hotels, barracks, ALFs, prisons, dormitories, as well as condominiums and other types of buildings. We can provide full assistance in budgeting, design, and planning for your project from concept to completion. Coreslab Structures (Atlanta) Inc. is a licensed contractor servicing Georgia, North Carolina, South Carolina, Tennessee, Virginia, Alabama, Louisiana, Florida, Kentucky, Mississippi, and West Virginia. Our design and installation departments are in-house to compete your project.

Our strength is not only in our products, but also in our people and the experience they bring to your project. We believe our staff to be the most experienced, dedicated team you can have in the industry. Our goal is to bring your project to realization with our performance commitment of Safety, Quality, and Service. We are a PCI Certified Plant. PCI Certification ensures a level of quality and structural integrity that stands alone. Our manufacturing plant is completely enclosed allowing us to promise delivery dates that are unaffected by inclement weather. We encourage you to view our facility and project photos as well as those of our sister plants posted on the Coreslab Structures website, www.coreslab.com. Contact Coreslab for your next project and take advantage of the Coreslab Solution.

Contact a Member of our Sales Team:

1655 Noahs Ark Road
PO Box 246
Jonesboro, Georgia 30236
(770) 471-1150
www.coreslab.com

Robert Brown
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PRECAST CONCRETE ADVANTAGES OVER OTHER CONSTRUCTION METHODS

Open Space

Many designers specify precast concrete components because of their structural flexibility. Design options include long clear spans or larger panels that reduce the number of columns or joints, saving time and material costs. By eliminating structural columns with long clear spans, foundation costs can be reduced as much as two thirds of structural steel or cast-in-place structures.

Rapid Construction

Precast concrete has significantly shorter construction schedules than other construction. The majority of the precast fabrication is completed while the foundations are being installed in the field. Once precast installation commences, the time needed to erect the precast structure is significantly quicker than other systems. Since precast components are already cured before they reach the job-site, they can be erected - from the foundation to the roof - in zones. Thus, complete sections of the building are ready for sub-trades to enter and begin their work, sometimes in just a few days. Cast-in-place concrete, on the other hand, is usually erected using a horizontal method. This means an entire floor must be poured and allowed to cure until the required design strength is achieved. This keeps any sub-trade's work from beginning and severely limits the ability to overlap schedule items. Coreslab delivers "finished" precast components to the jobsite, controlling waste at the project site.

Design Flexibility Unlimited Shape, Texture & Function

Precast hollow core allows for long unobstructed spans, creating open spaces and giving more design flexibility.



Precast components are fabricated in a PCI Certified casting facility, which negates the need for a third party special inspection, thus, saving the owner significant cost for work that would need to be performed on the site for cast-in-place concrete.

Maintenance/Durability

Precast concrete is recognized as having superior performance with less long-term maintenance, because the precast components are produced in a plant-controlled environment with a high degree of quality and craftsmanship, which is not possible to replicate on a job site. Also, all the precast components consist of high-performance concrete (5000 psi) in lieu of the 4000 psi concrete typically used for cast-in-place structures.



Springhill Suites

By Marriott

Orange Beach, Alabama



- Project consists of 76,000 square feet of 8 inch precast prestressed hollow core slabs and 60 scalloped precast balconies.
- Coreslab's scalloped precast balconies, while a challenge, added visual interest to the outside of the hotel while giving the hotel occupants additional space to look out over the pool and harbor.

ARCHITECT: Rule Joy Trammell & Rubio, LLC

ENGINEER: Ellinwood + Machado, LLC

GENERAL CONTRACTOR: Winter Construction

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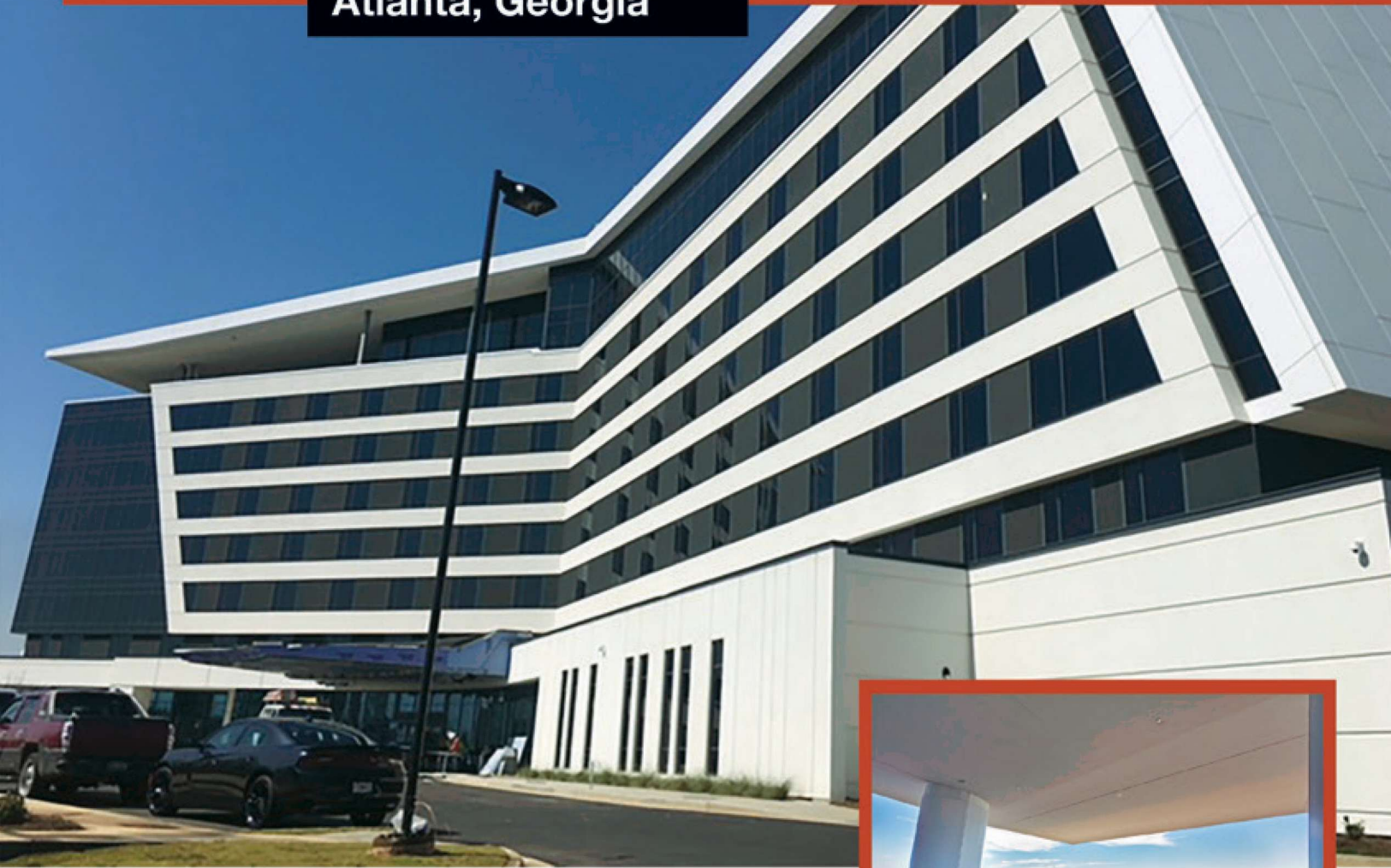
Email: sales@coreslab.com

www.coreslab.com

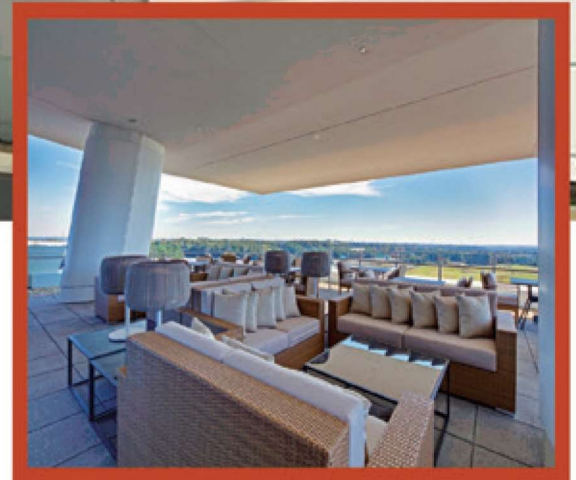


Solis Hotel

Atlanta, Georgia



- The Solis Hotel is eight stories high, with 214 guest rooms and signature suites. The hotel offers refined and approachable restaurants and bars, and 6,500 square feet of event space that includes a 3,600 square-foot ballroom. The rooftop lounge provides guests with a view of the Porsche driver development track, as well as landings and takeoffs at the Airport.
- 129,300 square feet of 8 inch Coreslab plank for the 2nd, 3rd, 4th, 5th, 6th, 7th and 8th floor, plus the low roof, ballroom roof and the roof level.



ARCHITECT: HO+K, Inc.

ENGINEER: Uzun + Case

GENERAL CONTRACTOR: Winter Construction

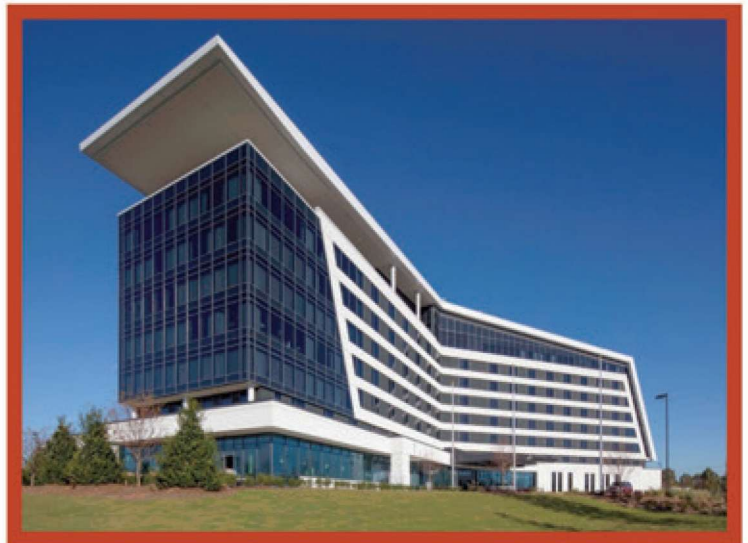
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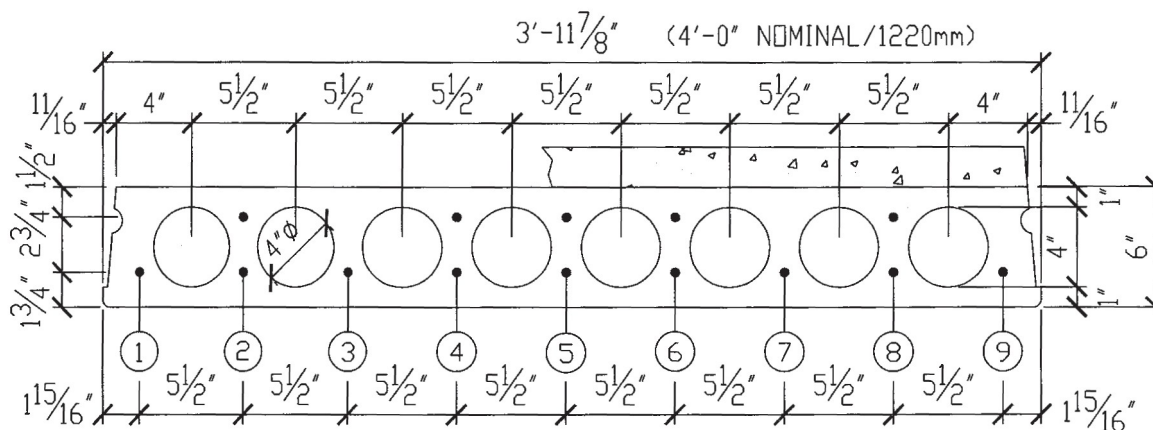
Load Tables

SPAN	NO TOPPING					NOMINAL 2" TOPPING				
	038A	048A	058A	068A	078A	038AT	048AT	058AT	068AT	078AT
12	243					351				
13	209					302				
14	182	247	308	336	343	262	355	439	447	455
15	160	218	272	307	317	230	312	388	413	420
16	141	193	242	272	278	202	277	340	383	390
17	122	168	211	242	242	174	240	300	339	363
18	105	146	184	212	212	149	208	262	301	335
19	90	127	162	187	187	129	181	229	268	299
20	78	111	142	165	165	108	153	198	240	268
21	68	98	126	147	147	88	128	169	210	241
22	58	86	112	130	130	70	107	149	181	215
23	50	76	99	116	116	54	88	122	156	190
24	43	67	88	104	104	41	72	103	134	165
25		59	78	93	93		57	86	115	143
26		51	70	83	83		45	71	98	124
27		45	62	75	74			58	82	107
28		40	54	67	66			46	69	91
29			47	59	56				56	78
30			41	52	51				45	65
31				46	45					54
32				40	39					44

- Contact Coreslab for special load requirements, conditions or cantilevers.
- ACI 318 18.8.3 Controls



6" CORESLAB



Physical Properties

6" CS Bare Unit		6" CS Composite Unit	
Wt.	= 46 psf	Wt.	= 71 psf
A	= 182.6 in ²	A	= 278.4 in ²
Y _b	= 3.00 in	Y _{bc}	= 4.38 in
I	= 749 in ⁴	I	= 1563.4 in ⁴
Y _t	= 3.00 in	Y _{tc}	= 3.62 in

Energy and Ecology Ratings

Thermal resistance $R = 1.07$

Sound transmission class STC = 48

Impact insulation class IIC = 23

"Coreslab" concrete strength: 5000 psi

Topping concrete strength: 3000 psi

Topping reinforcing: 6 X 6 w 1.4 X w 1.4

welded wire fabric recommended

Grout: sand/cement ratio: 3 : 1

The Many Benefits of Hollowcore

- Speed of construction can reduce overall project costs and overhead.
- Fire resistance can reduce insurance costs and potential loss of life and property.
- Sound control creates a more peaceful environment for tenants and occupants.
- Decay, deterioration and infestation are virtually eliminated so project appreciation is enhanced.
- Produced in a PCI Certified plant.

Key to "Coreslab" Nomenclature:

The diagram consists of a vertical line on the left with several horizontal tick marks. To the right of these tick marks are labels in blue text. To the right of these labels are descriptions in black text, connected by lines.

Unit Code	Description
6	Depth of bare unit
CS	"Coreslab"
04	Total number of strands in unit (proportional to unit cost)
8	Strand diameter in sixteenths
A	Top strand configuration
T	Composite unit (topping)

SPAN	NO TOPPING					NOMINAL 2" TOPPING				
	038A	048A	058A	068A	078A	038AT	048AT	058AT	068AT	078AT
15	249	341	383	392	400	319	435	488	497	506
16	221	304	355	363	371	282	387	452	462	468
17	193	266	328	338	346	245	337	420	428	436
18	167	232	294	316	323	211	294	372	400	407
19	145	204	260	295	303	183	257	327	374	381
20	126	179	230	267	285	159	226	289	347	358
21	110	158	204	242	268	138	199	256	310	338
22	97	140	182	221	244	120	175	228	276	315
23	85	125	163	199	223	104	155	203	247	286
24	74	111	146	179	204	91	137	181	222	260
25	65	98	131	162	188	79	121	162	200	236
26	56	88	117	146	171	68	107	145	180	213
27	49	78	106	132	155	58	93	128	162	193
28	42	69	95	120	141	46	78	110	143	175
29		61	85	108	129		65	95	125	155
30		54	77	98	117		53	81	109	137
31		48	69	89	107		42	68	94	120
32		42	62	81	98			56	81	106
33			56	73	89			46	69	92
34			50	66	81				58	80
35			44	59	74				48	69
36				53	67					58
37				47	60					49
38				41	54					40
39					48					
40					42					

- Contact Coreslab for special load requirements, conditions or cantilevers.
- ACI 318 18.8.3 Controls

SPAN IN FEET
(CLEAR SPAN & ONE
BEARING)

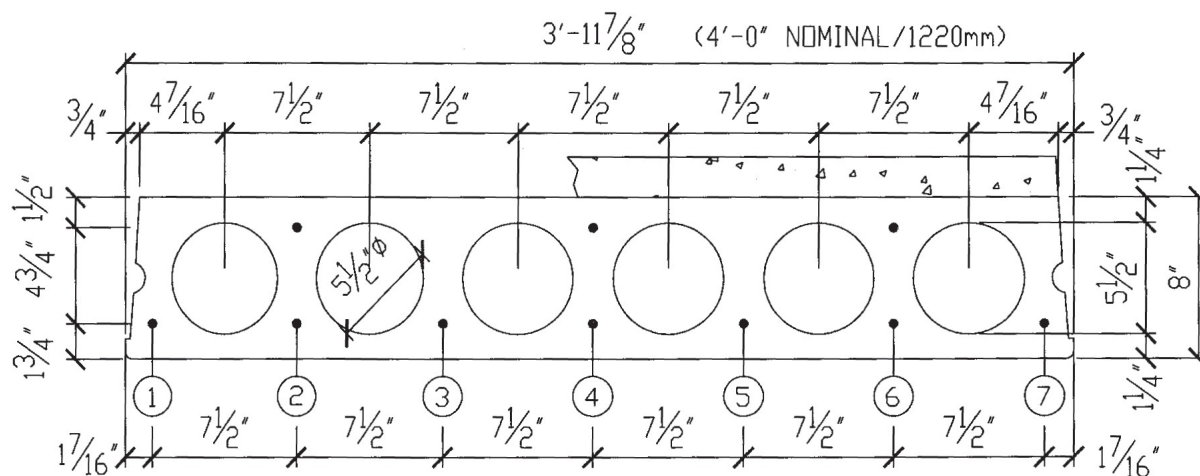
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ALLOWABLE
SUPERIMPOSED
LOAD

LOAD TABLES

8" CORESLAB



Physical Properties

8" CS Bare Unit

Wt.	=	57 psf
A	=	234.5 in ²
Y _b	=	4.00 in
I	=	1741.2 in ⁴
Y _t	=	4.00 in

8" CS Composite Unit

Wt.	=	82 psf
A	=	330.3 in ²
Y _{bc}	=	5.45 in
I	=	2931.5 in ⁴
Y _{tc}	=	4.55 in

Energy and Ecology Ratings

Thermal resistance R = 1.34

Sound transmission class STC = 50

Impact insulation class IIC = 28

"Coreslab" concrete strength: 5000 psi

Topping concrete strength: 3000 psi

Topping reinforcing: 6 X 6 w 1.4 X w 1.4
welded wire fabric recommended

Grout: sand/cement ratio: 3 : 1

The Many Benefits of Hollowcore

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Key to "Coreslab" Nomenclature:

8	CS	04	8	A	T
					• Composite unit (topping)
					• Top strand configuration
					• Strand diameter in sixteenths
					• Total number of strands in unit (proportional to unit cost)
					• "Coreslab"
					• Depth of bare unit

SPAN	NO TOPPING							NOMINAL 2" TOPPING						
	048A	058A	068A	078A	088A	098A	108A	048AT	058AT	068AT	078AT	088AT	098AT	108AT
20	241	248	255	261	268	275	282	292	298	305	311	318	325	331
21	226	233	240	246	252	259	265	266	280	286	293	299	305	311
22	201	220	226	232	238	244	250	237	264	270	276	282	288	294
23	180	208	214	219	225	231	237	211	249	255	260	266	272	277
24	161	197	202	208	213	219	225	188	235	241	246	252	257	263
25	145	187	192	197	203	208	213	168	221	228	233	239	244	249
26	130	172	182	188	193	198	203	150	199	216	221	227	232	237
27	117	156	174	178	183	188	193	135	180	206	211	215	220	225
28	106	141	165	170	175	180	184	120	163	196	200	205	210	214
29	95	121	157	162	167	172	176	108	147	184	191	195	200	204
30	86	117	145	155	160	164	169	96	133	168	182	187	191	195
31	77	106	135	148	153	157	161		120	153	174	178	182	187
32	70	97	123	141	146	150	155		109	139	164	170	174	178
33		88	113	131	140	144	148		98	127	151	163	167	171
34		80	104	122	135	138	142			116	140	156	160	164
35		73	95	114	127	133	133			105	129	146	153	157
36		66	87	106	119	124	124			93	118	135	147	151
37			80	98	111	114	114				105	125	140	145
38			73	90	103	106	106				94	116	130	139
39			67	83	96	98	98				83	105	121	134
40				77	89	91	91					94	113	125
41				71	82	84	84					84	103	117
42				65	76	78	78					74	93	109
43					70	72	72						83	101
44					65	67	67						74	91
45					60	62	62							82
46						57	57							74
47						53	53							

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- ACI 318 18.8.3 Controls

SPAN IN FEET
(CLEAR SPAN & ONE
BEARING)

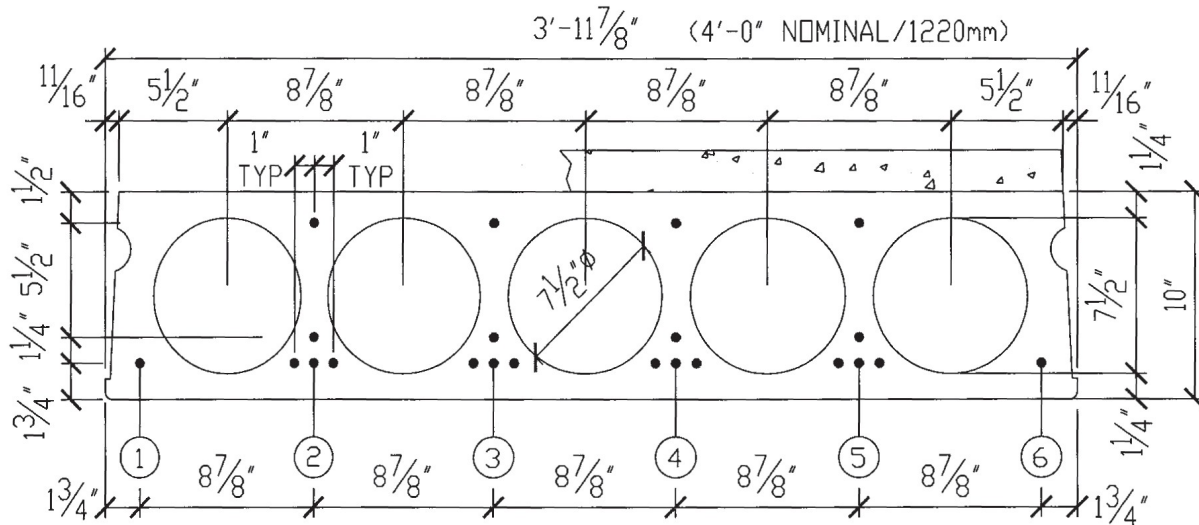
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ALLOWABLE
SUPERIMPOSED
LOAD

LOAD TABLES

10" CORESLAB



Physical Properties

10" CS Bare Unit

Wt. = 63 psf

A = 251.0 in²Y_b = 5.00 inI = 3156.0 in⁴Y_t = 5.00 in

10" CS Composite Unit

Wt. = 88 psf

A = 346.8 in²Y_{bc} = 6.66 inI = 5102.0 in⁴Y_{tc} = 5.34 in

Energy and Ecology Ratings

Thermal resistance R = 1.73

Sound transmission class STC = 52

Impact insulation class IIC = 33

"Coreslab" concrete strength: 5000 psi

Topping concrete strength: 3000 psi

Topping reinforcing: 6 X 6 w 1.4 X w 1.4
welded wire fabric recommended

Grout: sand/cement ratio: 3 : 1

The Many Benefits of Hollowcore

- Speed of construction can reduce overall project costs and overhead.
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- Produced in a PCI Certified plant.

Key to "Coreslab" Nomenclature:

10 CS 04 8 A T

- Depth of bare unit
- "Coreslab"
- Total number of strands in unit (proportional to unit cost)
- Strand diameter in sixteenths
- Top strand configuration
- Composite unit (topping)

SPAN	NO TOPPING							NOMINAL 2" TOPPING						
	05A	06A	07A	08A	09A	10A	11A	05AT	06AT	07AT	08AT	09AT	10AT	11AT
10'	784	803	822	840	849	860	871	928	947	965	983	993	1005	1018
11'	700	716	733	750	758	768	778	826	843	859	875	884	895	907
12'	631	646	661	677	684	692	702	743	758	773	787	796	805	816
13'	573	587	601	615	622	630	638	674	688	701	714	722	731	741
14'	524	537	550	563	569	577	585	616	628	641	653	660	668	677
15'	483	495	507	519	525	531	539	566	577	589	600	609	615	623
16'	446	458	469	480	486	492	499	523	533	544	555	561	568	576
17'	415	425	436	447	451	457	464	485	495	505	515	521	527	535
18'	387	397	407	417	421	427	433	452	461	471	480	485	492	499
19'	362	371	381	390	395	400	406	422	431	440	449	454	460	466
20'	340	349	358	367	371	376	381	396	404	413	421	426	431	438
21'	320	349	358	367	371	376	381	396	404	413	421	426	431	438
22'	302	310	318	326	330	334	339	351	358	366	373	378	383	388
23'	285	293	301	308	312	316	321	331	338	346	353	357	362	367
24'	266	278	285	292	296	300	305	301	320	327	334	338	343	348
25'	240	264	271	278	281	285	289	272	304	310	317	321	325	330
26'	218	251	258	264	267	271	275	245	288	295	301	305	309	314
27'	197	239	245	252	255	258	262	222	274	281	287	290	294	299
28'	179	224	234	240	243	247	251	201	251	267	273	277	281	285
29'	163	205	224	230	232	236	239	182	228	255	261	264	268	272
30'	149	187	214	220	222	226	229	165	208	244	249	252	256	260
31'	135	172	200	210	213	216	220	149	190	230	238	241	245	249
32'	123	157	187	202	204	207	211	135	173	211	228	231	234	238
33'	112	144	174	192	196	199	202	122	158	194	219	221	225	228
34'	102	133	162	180	188	191	194	111	145	178	206	212	216	219
35'	93	122	149	168	181	184	187	100	132	163	192	204	207	210
36'	85	112	138	157	170	177	180	90	121	150	178	194	199	202
37'	77	103	127	147	159	170	173	81	110	138	165	181	191	194
38'	70	94	118	138	149	160	167	73	100	127	153	168	183	187
39'	63	86	109	130	140	151	157	65	91	116	141	157	171	180
40'	57	79	100	120	132	142	146	56	80	106	130	147	159	172

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LOAD TABLES

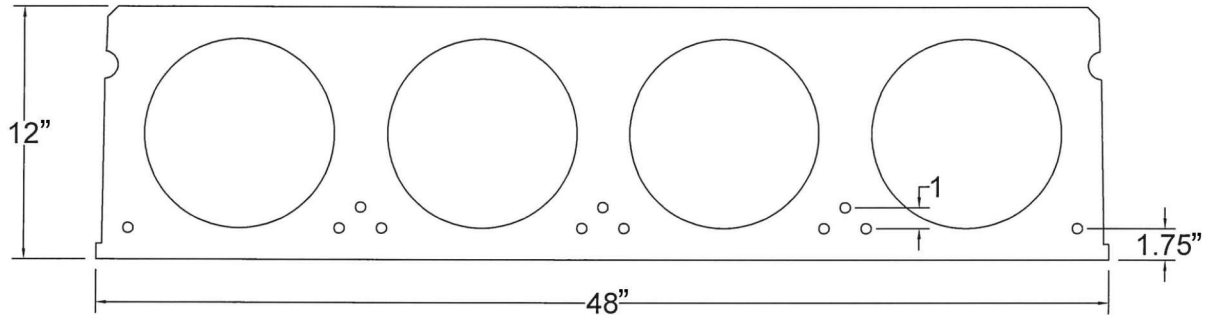
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**ALLOWABLE
SUPERIMPOSED
LOAD**

Notes:

LOAD TABLES

12" CORESLAB

**Physical Properties**

12" CS Bare Unit

Wt. = 73.5 psf

A = 283 in²Y_b = 6.0 inI = 5187 in⁴Y_t = 6.0 in

12" + 2" CS Composite Unit

Wt. = 98.5 psf

A = 379 in²Y_b = 7.45 inI = 8074 in⁴Y_t = 6.55 in**Energy and Ecology Ratings**

Thermal resistance R = 1.11

Sound transmission class STC = 51

Impact insulation class IIC = 25

"Coreslab" concrete strength: 5000 psi

Topping concrete strength: 3000 psi

Topping reinforcing: 6 X 6 w x 1.4 X w 1.4

Grout: sand/cement ratio: 3:1

The Many Benefits of Hollowcore

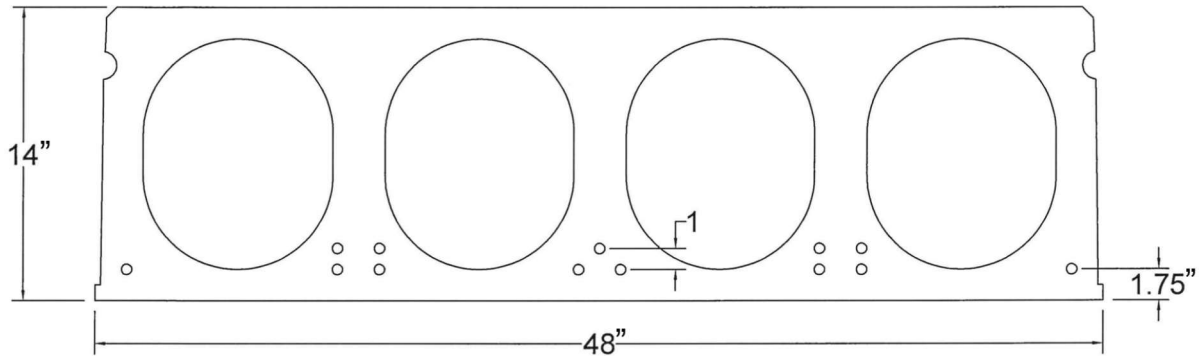
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Key to "Coreslab" Nomenclature:

12 CS 04 8 A T

- Depth of bare unit
- "Coreslab"
- Total number of strands in unit (proportional to unit cost)
- Strand diameter in sixteenths
- Top strand configuration
- Composite unit (topping)

14" CORESLAB



Physical Properties

14" CS Bare Unit

Wt. = 92 psf

A = 354 in²

Y_b = 6.93 in

I = 8866 in⁴

Y_t = 7.07 in

14" + 2" CS Composite Unit

Wt. = 117 psf

A = 439.9 in²

Y_b = 8.51 in

I = 13395 in⁴

Y_t = 7.49 in

Energy and Ecology Ratings

Thermal resistance R = 1.11

Sound transmission class STC = 53

Impact insulation class IIC = 27

"Coreslab" concrete strength: 5000 psi

Topping concrete strength: 3000 psi

Topping reinforcing: 6 X 6 w x 1.4 X w 1.4

welded wire fabric recommended

Grout: sand/cement ratio: 3:1

The Many Benefits of Hollowcore

- Speed of construction can reduce overall project costs and overhead.
- Fire resistance can reduce insurance costs and potential loss of life and property.
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Key to "Coreslab" Nomenclature:

14 CS 04 8 A T

- Depth of bare unit
- "Coreslab"
- Total number of strands in unit (proportional to unit cost)
- Strand diameter in sixteenths
- Top strand configuration
- Composite unit (topping)

LOAD TABLES

SPAN	NO TOPPING							NOMINAL 2" TOPPING						
	048A	058A	068A	078A	088A	098A	108A	048AT	058AT	068AT	078AT	088AT	098AT	108AT
25"		296	332	342	351	356	362		328	372	381	389	394	401
26"		296	316	325	334	339	345		297	354	362	370	375	381
27"		245	302	310	318	323	329		269	334	345	352	357	363
28"		223	277	296	304	309	314		244	304	329	336	341	346
29"		204	254	283	291	295	300		222	278	314	321	326	331
30"		186	233	271	279	283	288		202	254	300	307	312	317
31'		170	214	254	267	271	276		184	233	281	294	298	303
32'		155	197	237	256	260	265		167	213	258	282	286	291
33'		142	181	220	244	250	254		152	195	238	270	274	179
34'		130	167	203	228	240	245		139	179	219	258	264	268
35'		119	154	188	214	231	236		126	164	202	239	253	258
36'		109	142	174	201	217	227		115	151	186	221	244	248
37'		100	131	161	189	204	219		104	138	172	205	229	239
38'		91	121	150	177	192	206		94	127	159	190	214	230
39'		83	111	139	165	180	194		85	116	146	176	201	217
40'		76	103	129	153	170	183		77	106	135	163	188	204
41'		69	94	119	143	160	173		69	97	124	151	175	191
42'		63	87	111	133	151	163		62	88	115	140	163	180
43'		57	80	102	124	141	154		55	81	105	130	152	169
44'		51	73	95	115	132	145			73	97	120	141	158
45'			67	88	107	123	136				89	111	131	149
46'			62	81	100	115	128				79	101	121	140
47'			56	75	93	107	120				70	91	110	129
48'			51	69	87	100	112					82	100	118
49'				64	80	93	105					73	90	107
50'				59	75	87	98					64	81	98
51"					69	81	92					57	73	89
52"					64	76	86						65	80
53"					59	70	80						57	72
54"						65	75						50	64
55"						60	70							57

- Contact Coreslab for special load requirements, conditions or cantilevers.
- ACI 318 18.8.3 Controls



SPAN	NO TOPPING							NOMINAL 2" TOPPING						
	048A	058A	068A	078A	088A	098A	108A	048AT	058AT	068AT	078AT	088AT	098AT	108AT
56"					55		65							50
57"							60							
58"							56							
59"							51							
60"														

- Contact Coreslab for special load requirements, conditions or cantilevers.
- ACI 318 18.8.3 Controls



LOAD TABLES

SPAN	NO TOPPING			NOMINAL 2" TOPPING		
	118A	128A	138A	118AT	128AT	138AT
25"	368	375	382	407	414	421
26"	351	357	364	387	394	401
27"	335	341	347	369	375	382
28"	320	326	332	352	358	365
29"	306	312	318	337	342	348
30"	293	299	304	322	328	334
31'	281	286	292	308	314	320
32'	270	275	280	296	301	307
33'	259	264	269	284	289	294
34'	249	254	259	273	278	283
35'	240	245	250	262	267	272
36'	231	236	241	252	257	262
37'	223	227	232	243	248	252
38'	215	220	224	234	239	243
39'	207	212	213	226	230	235
40'	196	201	200	218	222	226
41'	185	189	187	206	214	219
42'	175	177	175	194	207	211
43'	165	165	164	182	196	0204
44'	156	155	154	171	185	198
45'	147	145	144	161	174	186
46'	138	136	135	152	164	176
47'	129	128	127	143	154	166
48'	121	120	119	134	145	156
49'	114	112	111	125	137	147
50'	107	105	104	114	129	139
51"	100	99	98	105	121	131
52"	94	92	91	95	111	124
53"	88	87	86	87	101	116
54"	82	81	80	78	93	107
55"	77	76	75	71	84	98

- Contact Coreslab for special load requirements, conditions or cantilevers.
- ACI 318 18.8.3 Controls

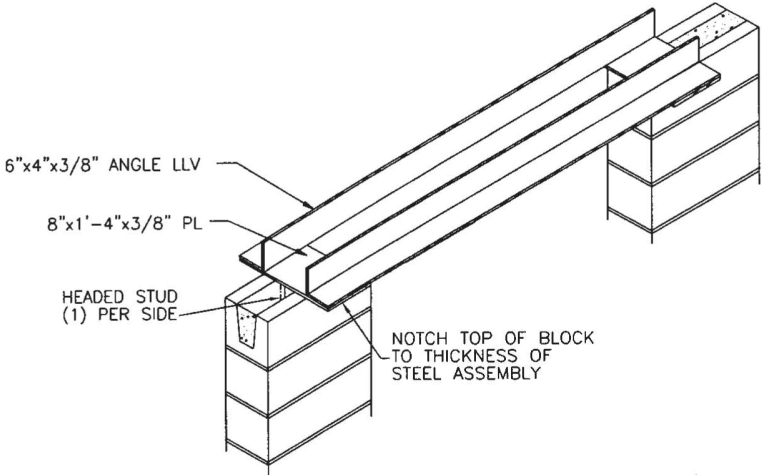


SPAN	NO TOPPING			NOMINAL 2" TOPPING		
	118A	128A	138A	118AT	128AT	138AT
56"	72	71	70	63	77	90
57"	67	66	65	56	69	82
58"	62	61	61	50	62	74
59"	58	57	56		55	66
60"	54	53	52			57

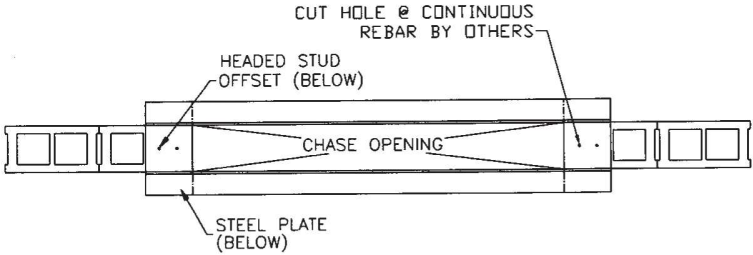
- Contact Coreslab for special load requirements, conditions or cantilevers.
- ACI 318 18.8.3 Controls



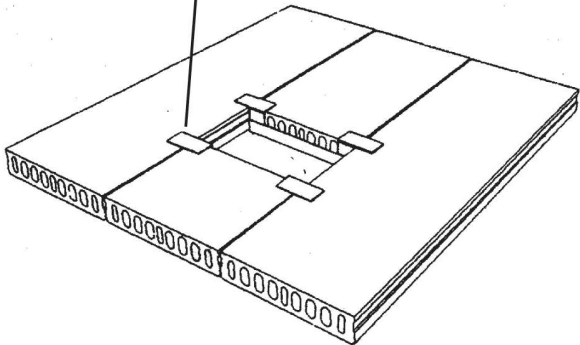
Drawings & Details



Saddle Detail at Wall Chase Opening



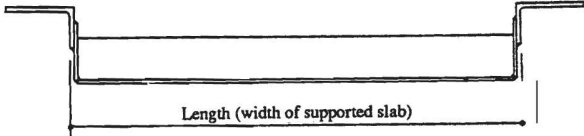
Note Projection



Structurally Supported Opening



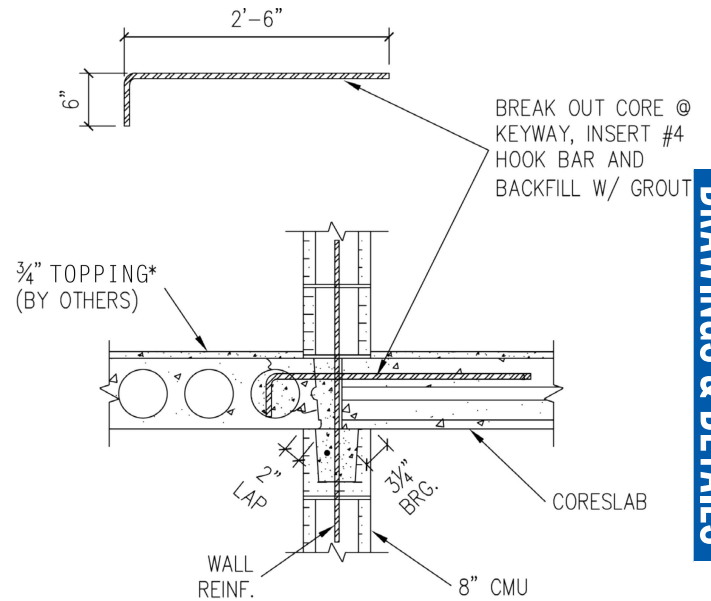
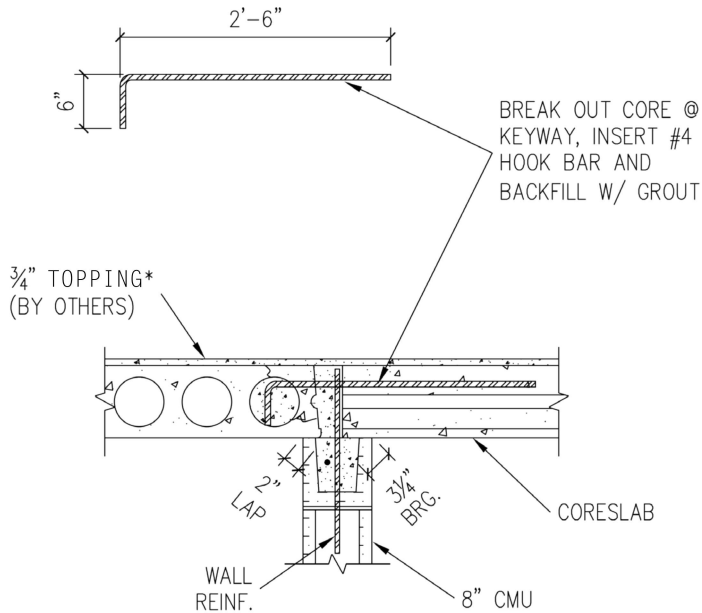
Plan



Elevation

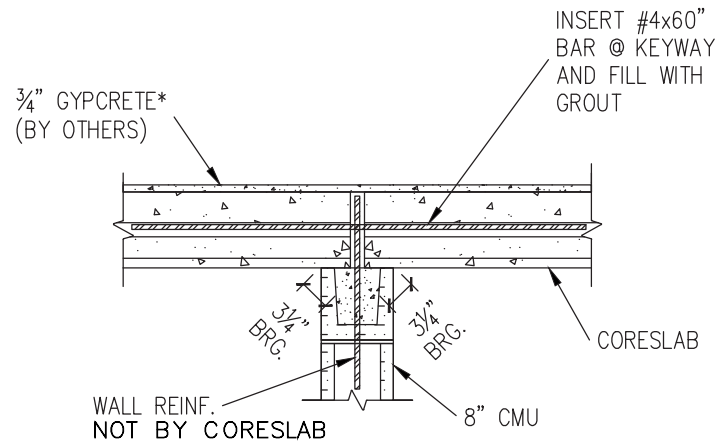
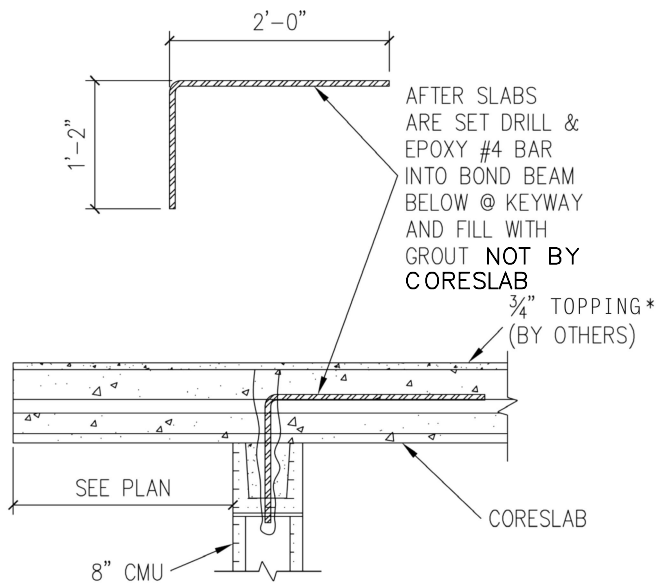
Hanger

DRAWINGS & DETAILS



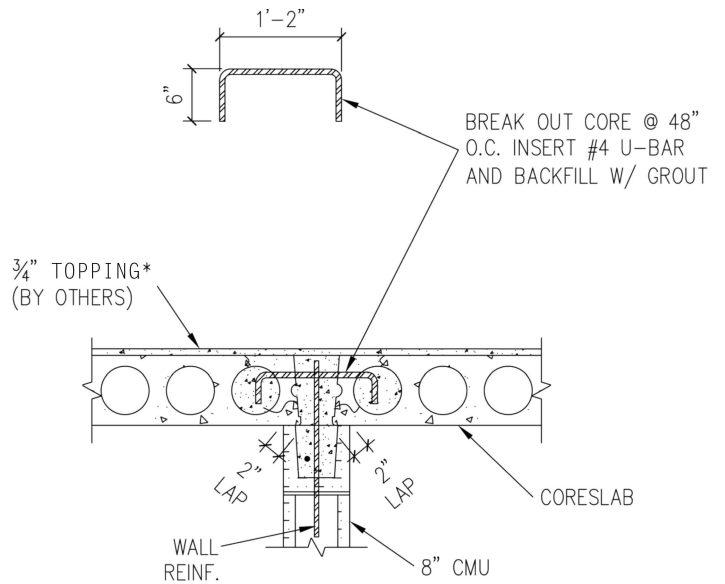
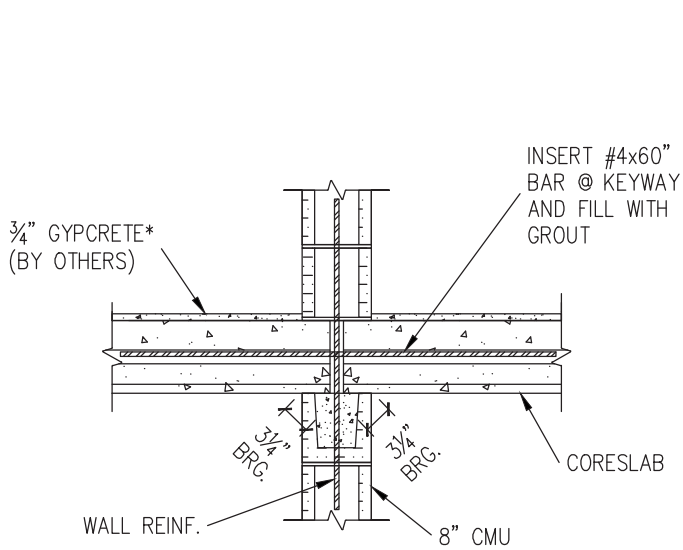
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1 BEARING/ LAP CONDITION ON CMU
* COMPOSITE TOPPING CAN BE SUBSTITUTED

X
1 BEARING/ LAP CONDITION ON CMU
* COMPOSITE TOPPING CAN BE SUBSTITUTED



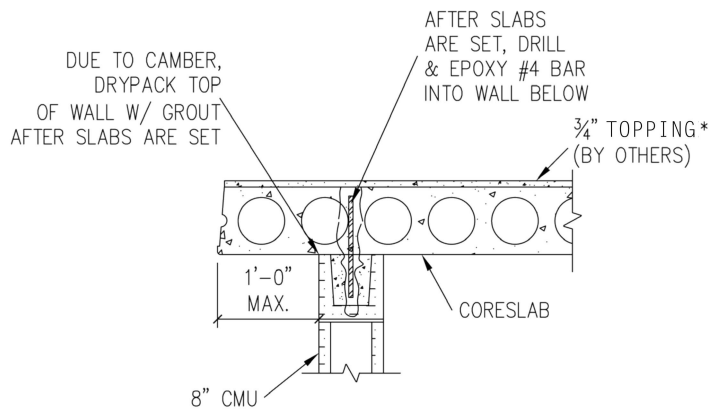
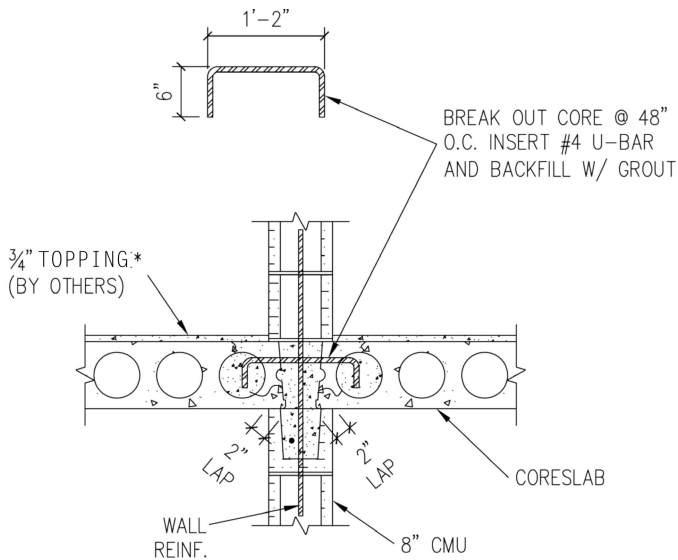
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* COMPOSITE TOPPING CAN BE SUBSTITUTED

X
1 DOUBLE BRG. CONDITION ON CMU
* COMPOSITE TOPPING CAN BE SUBSTITUTED



X
1 DOUBLE BRG. CONDITION ON CMU
* COMPOSITE TOPPING CAN BE SUBSTITUTED

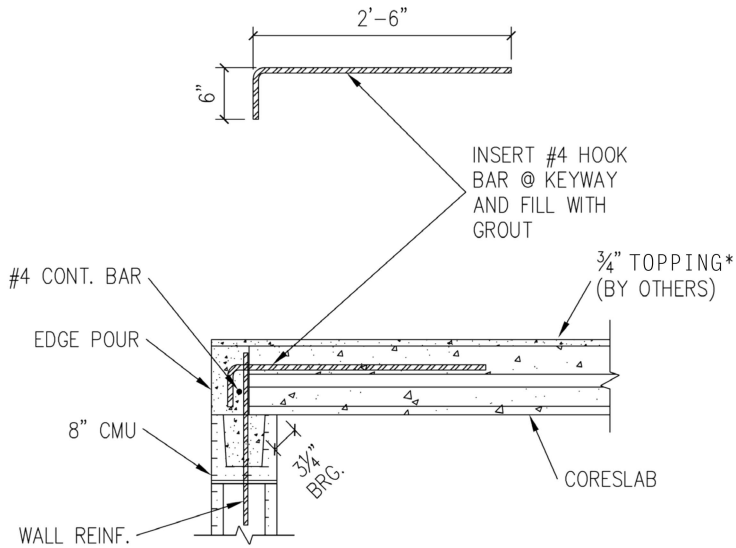
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* COMPOSITE TOPPING CAN BE SUBSTITUTED



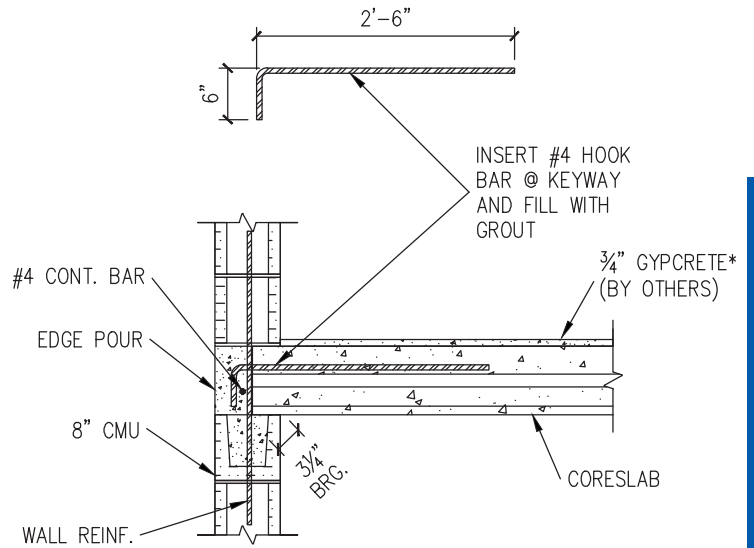
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* COMPOSITE TOPPING CAN BE SUBSTITUTED

X
1 OVERHANG LAP CONDITION ON CMU
* COMPOSITE TOPPING CAN BE SUBSTITUTED

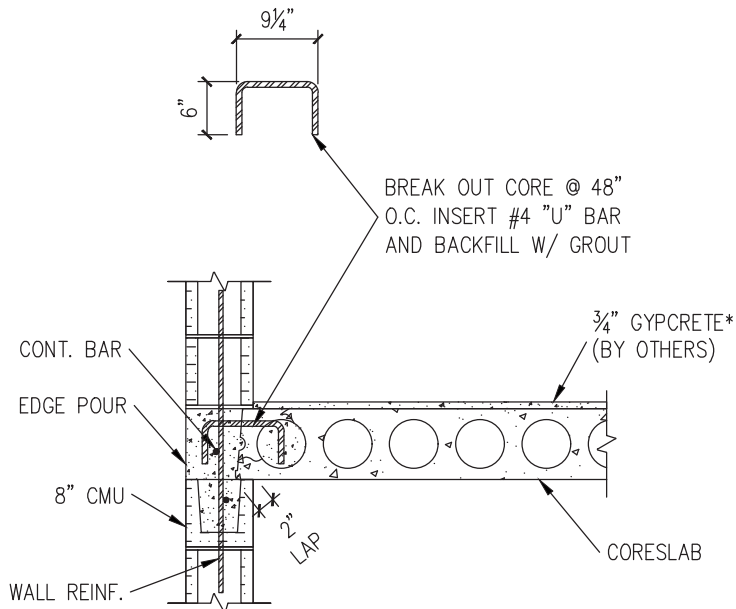
DRAWINGS & DETAILS



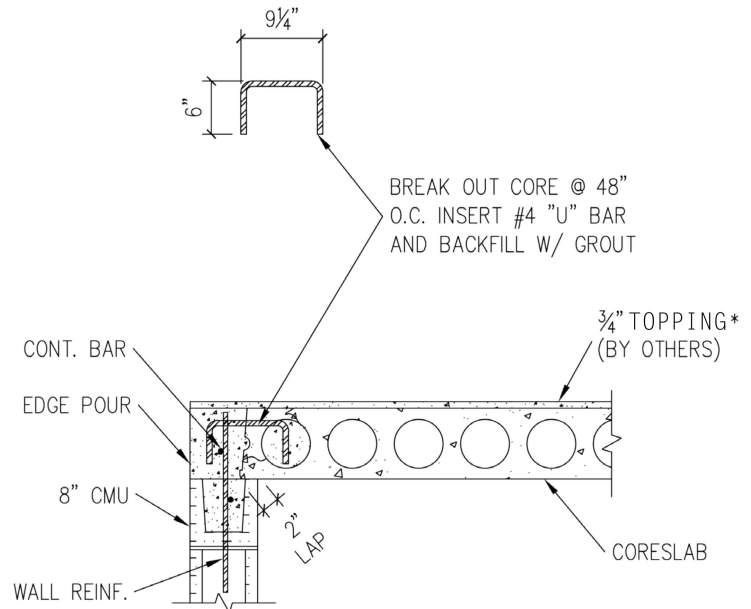
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* COMPOSITE TOPPING CAN BE SUBSTITUTED



X
1 SINGLE BRG. CONDITION ON CMU
* COMPOSITE TOPPING CAN BE SUBSTITUTED

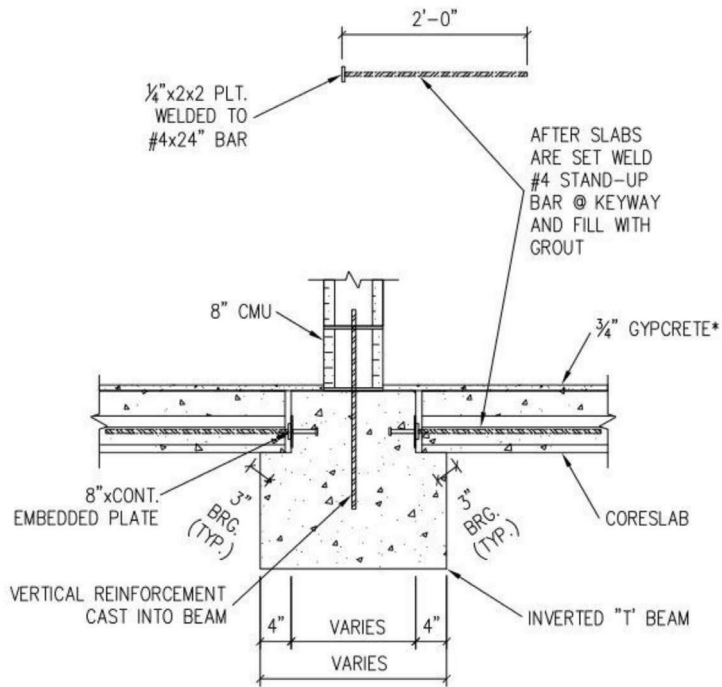


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1 SINGLE LAP CONDITION ON CMU
* COMPOSITE TOPPING CAN BE SUBSTITUTED

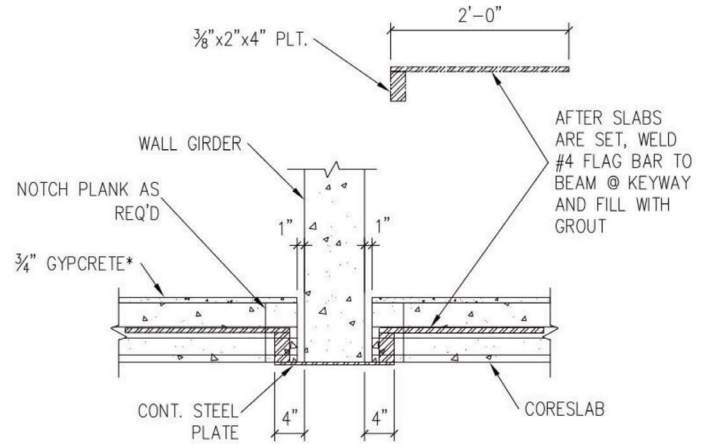


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* COMPOSITE TOPPING CAN BE SUBSTITUTED

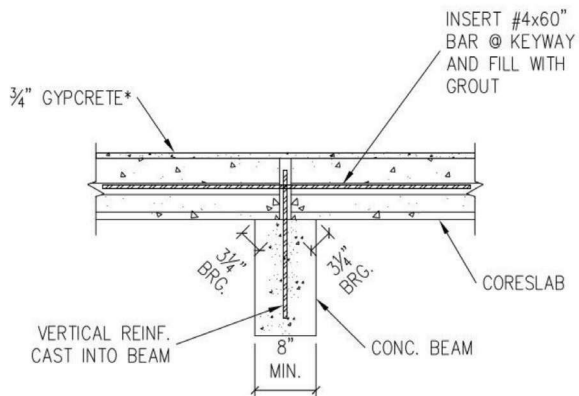
CORES LAB[®] STRUCTURES



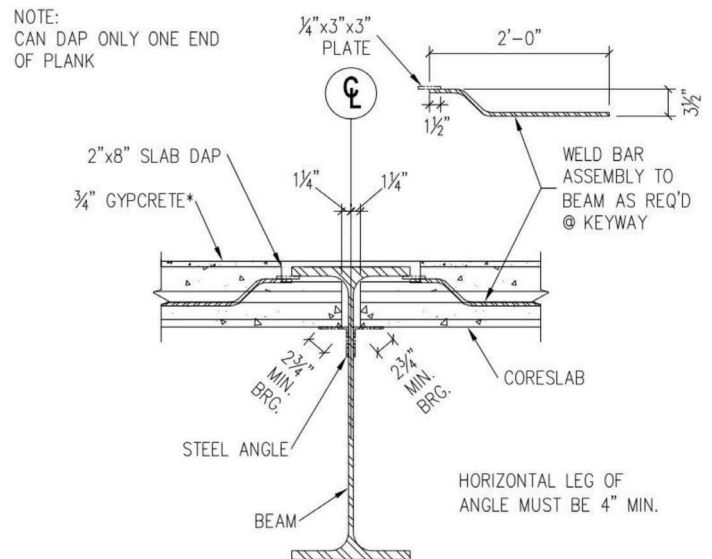
X
1 BRG. CONDITION @ INVERTED BEAM
* COMPOSITE TOPPING CAN BE SUBSTITUTED



X
1 DOUBLE BRG. COND. @ WALL GIRDER
* COMPOSITE TOPPING CAN BE SUBSTITUTED

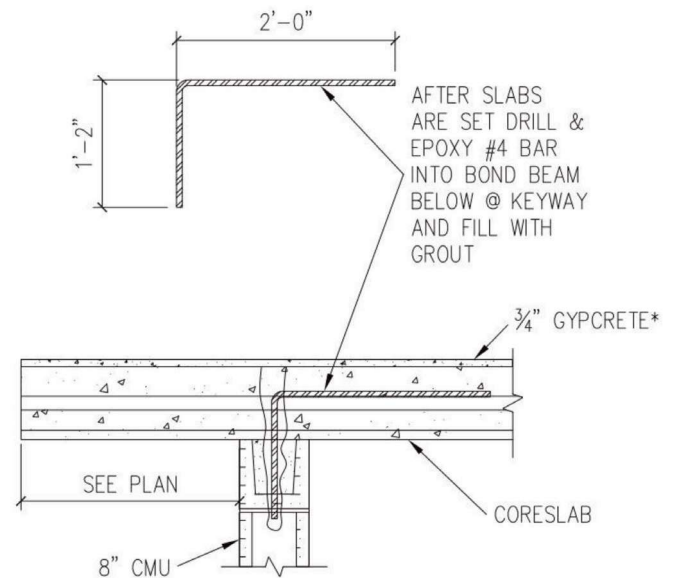
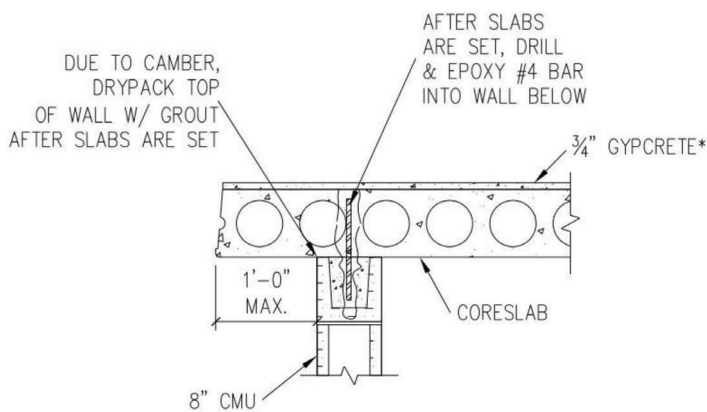
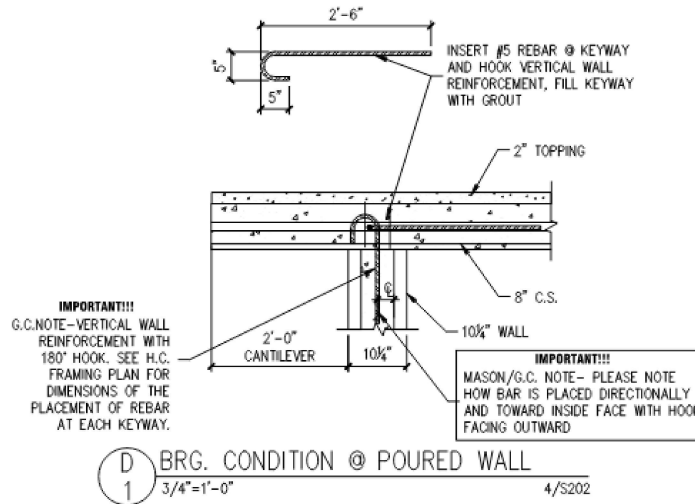


X
1 DOUBLE BRG. CONDITION ON CONC. BEAM
* COMPOSITE TOPPING CAN BE SUBSTITUTED



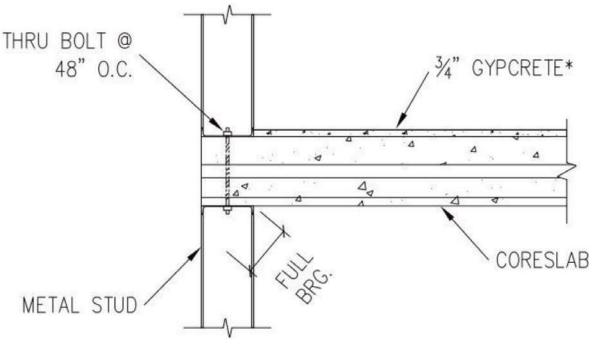
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* COMPOSITE TOPPING CAN BE SUBSTITUTED

DRAWINGS & DETAILS

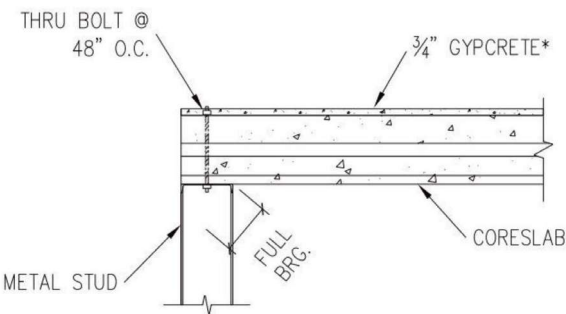


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1 OVERHANG LAP CONDITION ON CMU
* COMPOSITE TOPPING CAN BE SUBSTITUTED

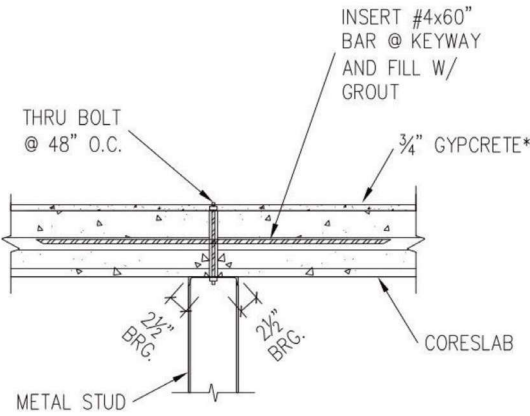
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1 CANTILEVER CONDITION ON CMU
* COMPOSITE TOPPING CAN BE SUBSTITUTED



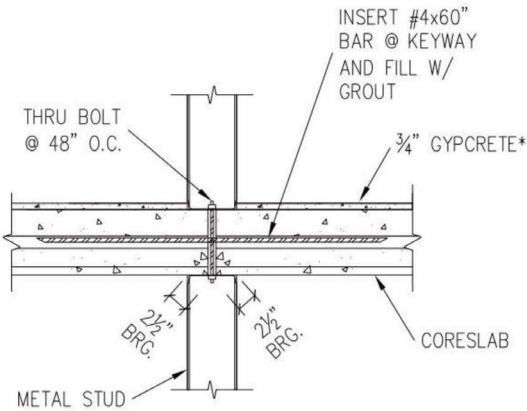
X
1 SINGLE BRG. COND. ON METAL STUD
*COMPOSITE TOPPING CAN BE SUBSTITUTED



X
1 SINGLE BRG. COND. ON METAL STUD
*COMPOSITE TOPPING CAN BE SUBSTITUTED

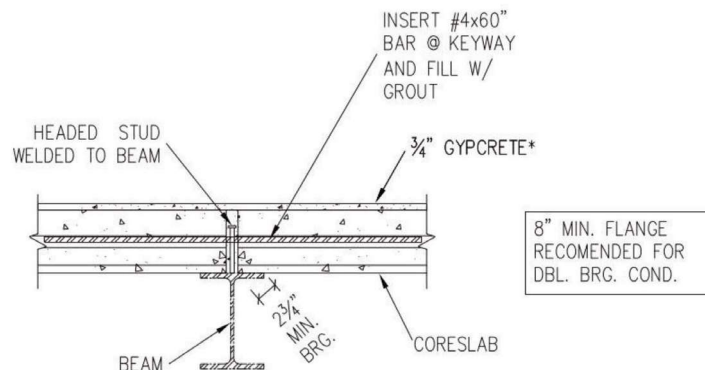
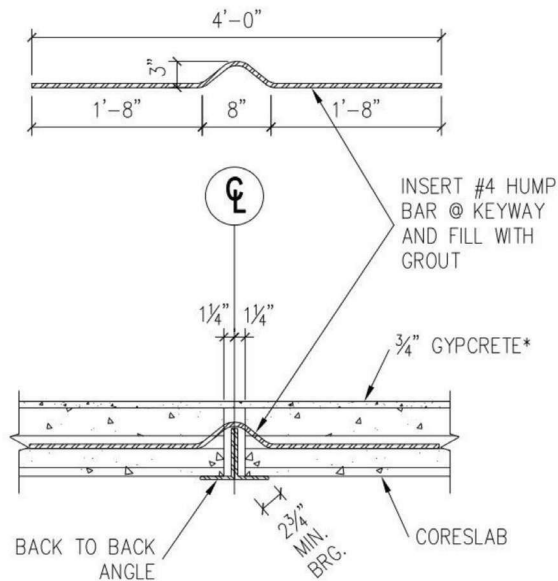


X
1 DOUBLE BRG. COND. ON METAL STUD
* COMPOSITE TOPPING CAN BE SUBSTITUTED



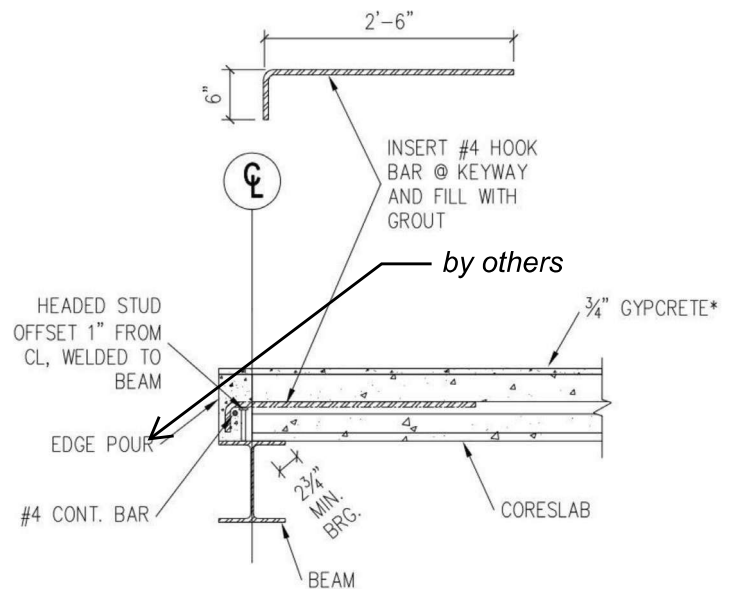
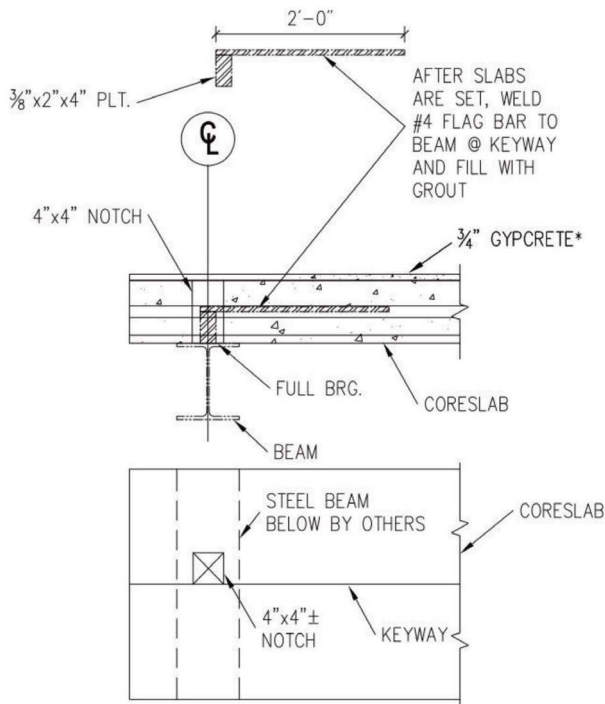
X
1 DOUBLE BRG. COND. ON METAL STUD
* COMPOSITE TOPPING CAN BE SUBSTITUTED

DRAWINGS & DETAILS



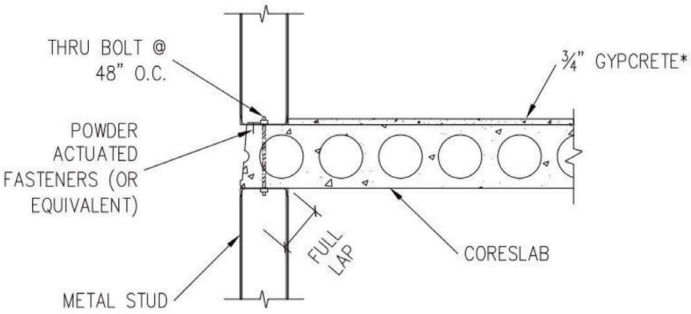
X
1 DOUBLE BRG. COND. ON DBL. ANGLE
* COMPOSITE TOPPING CAN BE SUBSTITUTED

X
1 DOUBLE BRG. COND. ON STEEL BEAM
*COMPOSITE TOPPING CAN BE SUBSTITUTED

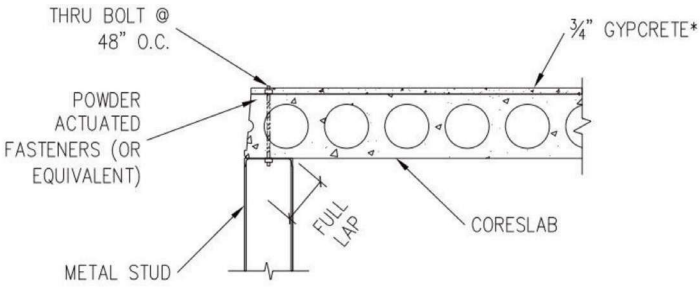


X
1 SINGLE BRG. COND. ON STL. BEAM
*COMPOSITE TOPPING CAN BE SUBSTITUTED

X
1 SINGLE BRG. COND. ON STL. BEAM
*COMPOSITE TOPPING CAN BE SUBSTITUTED



X
1 SINGLE LAP COND. ON METAL STUD
* COMPOSITE TOPPING CAN BE SUBSTITUTED



X
1 SINGLE LAP COND. ON METAL STUD
* COMPOSITE TOPPING CAN BE SUBSTITUTED

DRAWINGS & DETAILS

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

FIRE RATING

"Coreslab" hollowcore plank by Coreslab carries a 1 hour fire rating in all applications by passing the test requirements set forth by ASTM E-119 as performed by U.L. Laboratories (Note 1). Criteria for "Coreslab" to carry a 2 hour fire rating is found in chapter 7 of the International Building Code 2000, Sections 703.3 and 720. Key criteria include equivalent slab thickness, concrete cover over the strand, type of aggregate used and end bearing conditions being restrained or unrestrained.

Equivalent slab thickness is determined by dividing the net cross sectional area of the slab by the width of the slab (IBC 720.2.2.1.1). Below is a table showing the equivalent thickness of "Coreslab" plank:

"Coreslab" Thickness	Cross Sectional Area Including Grout in Joints	Equivalent Thickness Bare Unit (Overlays will increase equivalent thickness)
6"	186.0 in ²	3.89 in
8"	240.0 in ²	5.00 in
10"	257.2 in ²	5.37 in
12"	290.9 in ²	6.08 in

Minimum Slab Thickness, Equivalent Thickness (in) for Fire Resistance Rating of Table 720.2.2.1 (IBC 2000)					
Concrete Type	1 hour	1 1/2 Hour	2 Hour	3 Hour	4 Hour
*Siliceous	3.5	4.3	5.0	6.2	7.0
Carbonate	3.2	4.0	4.6	5.7	6.6
Sand-Lightweight	2.7	3.3	3.8	4.6	5.4
Lightweight	2.5	3.1	3.6	4.4	5.1
*Standard "Coreslab" Plank					

(Note 1) "Coreslab" does not carry a U.L. label. Tests were run on hollowcore of the same shape and composition as "Coreslab" plank.

Concrete coverage over the strand for standard "Coreslab" plank is 1 1/2" (see plank cross section dimensions in the load tables). Below is table 720.2.3(2) from International Building Code showing the required strand coverage for different fire ratings:

TABLE 720.2.3(2) Cover Thickness for Prestressed Concrete Floor or Roof Slabs (Inches) (From IBC 2000)										
Concrete Aggregate Type	Thickness of cover (in) for Fire Resistance Rating of									
	Restrained (Note 2)					Unrestrained (Note 2)				
	1hr	1 1/2hr	2hr	3hr	4hr	1hr	1 1/2hr	2hr	3hr	4hr
*Siliceous	3/4	3/4	3/4	3/4	3/4	1 1/8	1 1/2	1 3/4	2 3/8	2 3/4
Carbonate	3/4	3/4	3/4	3/4	3/4	1	1 3/8	1 5/8	2 1/8	2 1/4
Sand Lightweight or Lightweight	3/4	3/4	3/4	3/4	3/4	1	1 3/8	1 1/2	2	2 1/4
*Standard "Coreslab" Plank										

(Note 2) Read further in this section for definitions of restrained and unrestrained assemblies.

ASTM E-119 TABLE X3.1
Construction Classification, Restrained and Unrestrained

I. Wall Bearing:

Single span and simply supported end spans of multiple bays:^A

- (1) Open-web steel joists or steel beams, supporting concrete slab, precast units, or metal deckingunrestrained
- (2) Concrete slabs, precast units, or metal deckingunrestrained

Interior spans or multiple bays:

- (1) Open-web steel joists, steel beams or metal decking, supporting continuous concrete slabrestrained
- (2) Open-web steel joists or steel beams, supporting precast units or metal deckingunrestrained
- (3) Cast-in-place concrete slab systemsrestrained
- (4) Precast concrete where the potential thermal expansion is resisted by adjacent construction^Brestrained

II. Steel framing:

- (1) Steel beams welded, riveted, or bolted to the framing membersrestrained
- (2) All types of cast-in-place floor and roof systems (such as beam-and-slabs, flat slabs, pan joists, and waffle slabs) where the floor or roof system is secured to the framing membersrestrained
- (3) All types of prefabricated floor or roof systems where the structural members are secured to the framing members and the potential thermal expansion of the floor or roof system is resisted by the framing system or the adjoining floor or roof construction^Brestrained

III. Concrete framing:

- (1) Beams securely fastened to the framing membersrestrained
- (2) All types of cast-in-place floor or roof systems (such as beam-and-slabs, flat slabs, pan joists, and waffle slabs) where the floor or roof system is cast with the framing membersrestrained
- (3) Interior and exterior spans of precast systems with cast-in-place joints resulting in restraint equivalent to that which would exist in condition III (1), concrete framing.restrained
- (4) All types of prefabricated floor or roof systems where the structural members are secured to such systems and the potential thermal expansion of the floor or roof system is resisted by the framing system or the adjoining floor or roof construction^Brestrained

IV. Wood construction:

All typesunrestrained

^A Floor and roof systems can be considered restrained when they are tied into walls with or without tie beams, the walls being designed and detailed to resist thermal thrust from the floor or roof system.

^B For example, resistance to potential thermal expansion is considered to be achieved when

- (1) Continuous structural concrete topping is used.
- (2) The space between the ends of precast units or between the ends of units and the vertical face of supports is filled with concrete or mortar, or
- (3) The space between the ends of precast units and the vertical face of supports, or between the ends of solid or hollowcore slab units does not exceed 0.25% of the length for normal weight concrete members or 0.1% of the length for structural lightweight concrete members.

Specifications

SECTION 03411

Prestressed Hollowcore Concrete Plank

Scope

Furnish all labor and materials for the manufacture, delivery and erection of "CORESLAB" prestressed hollowcore plank as specified herein and shown on drawings.

1. Applicable Publications

- 1.1 American Concrete Institute (ACI 318) Latest Issue.
- 1.2 American Society for Testing and materials (ASTM) Latest Issue.
- 1.3 Precast/Prestressed Concrete Institute (PCI).
 - 1.3.1 MNL-116-99 PCI Manual for Quality Control for Plants and Production of Precast Prestressed Concrete Products.
 - 1.3.2 MNL-126-98 Manual for the Design of Hollow-Core Slabs.

2. Qualifications

- 2.1 Manufacturer shall be a firm specializing in providing prestressed concrete products and service of the types specified herein on the plans; and shall have a minimum of 5 years successful experience in the fabrication of prestressed concrete units of quality and scope required on this project.
- 2.2 Furnish precast prestressed units in accordance with Precast/Prestressed Concrete Institute's Manual for Quality Control for Plants and Production of Precast Prestressed Concrete Products.
- 2.3 The precast concrete manufacturing plant shall be a member of PCI and participate in its Plant Certification program prior to submittal of bid.

3. Product Design

- 3.1 Loading for design
 - 3.1.1 Initial handling and erection stresses.
 - 3.1.2 All dead and live loads as specified on the contract drawings.
 - 3.1.3 All other loads specified for hollowcore slab units where applicable.
- 3.2 General contractor shall furnish sizes and location of all required penetrations for work of other trades.
- 3.3 Design calculations of products not completed on the contract drawings shall be performed by a registered engineer experienced in precast prestressed concrete design and submitted for approval upon request.
- 3.4 Design shall be in accordance with ACI 318 or applicable codes.
- 3.5 Design deviations will be permitted only after the Architect / Engineers approval of the manufacturer's proposed design supported by complete design calculations and drawings. Design deviations shall provide an installation equivalent to the basic intent without incurring additional cost to the owner.
- 3.6 Fire resistance of units shall be designed in accordance with:
 - Southern Building Code Section 3102
 - IBC 2000 Section 703.3 and 720.2.2.1.1
 - ASTM E-119

4. Testing

- 4.1 Manufacturer shall make and test concrete compression specimens representative of the work in accordance with PCI MNL-116-99.

5. Submittals

- 5.1 Shop drawings shall be submitted for approval, showing identifying marks of each unit, holes (other than plumbing and electrical), anchorage details, design loads, location of all prestressing steel, and layout plan. The manufacturer shall not proceed with manufacture prior to receiving general contractor and architect's approval of shop drawings. Field verification of dimensions is the responsibility of the general contractor.

6. Materials

- 6.1 Concrete Materials
 - 6.1.1 Portland cement type I or III shall conform to ASTM C-150.
 - 6.1.2 Aggregates: shall conform to ASTM C-33, or have shown by special test or actual service to produce concrete of adequate strength and durability.
 - 6.1.3 Fly Ash: shall conform to ASTM C618, Mineral Admixture
 - 6.1.4 Concrete shall be zero slump. Water shall be potable or free from materials in amounts harmful to concrete embedded steel.
- 6.2 Prestressing steel: High tensile seven wire strand (270 KSI) tested according to ASTM-A416 / A416M-99. The wire shall be free of contaminants which would prevent bond to concrete.
- 6.3 Concrete Mixes
 - 6.3.1 28-day concrete compressive strength minimum of 5000 psi.
 - 6.3.2 Strand release concrete strength minimum of 3500 psi.
 - 6.3.3 Use of calcium chloride, chloride ions or other salts is not permitted.
- 6.4 Bearing Pads
 - 6.4.1 Plastic: Multimer plastic strips shall be non-leaching and support construction loads with no visible overall expansion.
 - 6.4.2 Tempered Hardboard: to be used only where not exposed to continual wetting.

7. Fabrication

- 7.1 Prestressed concrete slabs shall be machine extruded in one single operation on long production lines on smooth rigid forms in 4'-0" nominal widths.
- 7.2 Openings
 - 7.2.1 Opening requiring hanger type supplementary steel members shall be by prestressed concrete manufacturer.
 - 7.2.2 All other holes or openings shall be cut in field by trade requiring the openings.
 - 7.2.3 In no case shall any hole be cut without approval of prestressed concrete manufacturer.
- 7.3 Finish
 - 7.3.1 Standard Finish: Normal plant-run finish produced in forms that impart a smooth finish to concrete. Small surface imperfections, normal color variations and form marks, and minor chips and spalls will be tolerated.
- 7.4 Patching
 - 7.4.1 Patching will be acceptable providing the structural adequacy of the hollowcore unit is not impaired.

8. Tolerances

- 8.1 Provide units with tolerance within the limits recommended by the Precast / Prestressed Concrete Institutes "Manual for Quality Control for Plants and Production of Precast Prestressed Concrete Products." MNL-116-99.
-

9. Erection

- 9.1 Prestressed concrete units shall be erected into final position under the supervision of the manufacturer or erector experienced in installation of the types of units specified herein.
- 9.2 Site Access: The General Contractor shall be responsible for providing suitable access to the building, proper drainage, and firm level bearing for the hauling and erection equipment to operate under their own power.
- 9.3 Preparation: The General Contractor shall be responsible for:
 - 9.3.1 Providing true level bearing surfaces on all field placed bearing walls and other field placed supporting members.
 - 9.3.2 All pipes, stacks, conduits and other such items shall be stubbed off at level lower than the bearing plane of the prestressed concrete products until after the latter are set.
- 9.4 Alignment: Erection tolerances shall be in conformance with PCI MNL-126-98 except where in specific circumstances the shop drawings show specific deviations.

10. Grouting

- 10.1 Prestressed concrete units shall be aligned and leveled prior to grouting keyway joints in accordance with requirements and tolerances of PCI MNL-116-99. This operation is to be performed prior to units being loaded or ends restrained.
- 10.2 Keyways between units shall be cleared and filled solidly with grout. Grout that may have seeped through to surfaces in areas below shall be removed before hardening.
- 10.3 Fine grout shall be mixed in proportion of one part Portland Cement and three parts sand with an approximate 11" slump.
- 10.4 Non-shrink grout is *not* recommended.

11. Topping

- 11.1 Topping, when required, shall be placed by General Contractor with concrete of 3000 psi compressive value, to a minimum thickness of 2" and reinforced with a 6X6 10/10 welded wire mesh. General Contractor shall remove deleterious or bond inhibiting substances, and wet surface prior to topping.

12. Painting

- 12.1 For complete paint coverage, a minimum of one coat of heavy bodied primer (similar to block filler) and one coat sprayed on medium to heavy texture paint is recommended. Enamels and other flat surface paints at normal application rates do not completely bridge all surfaces voids and may create unsatisfactory results.

Installation

"CORESLAB" ERECTION RECOMMENDATIONS

The following recommendations are provided as a guide to assist in the efficient and proper installation of precast, prestressed hollowcore concrete "CORESLAB" floor and roof plank members for horizontal (flat) applications. Pitched, inclined or vertical (wall) applications require special considerations and should be addressed on a specific job by job basis. Coreslab Structures (Atlanta) follows PCI safety guidelines as well as OSHA Fall Protection Subpart M to insure a quality installation and safe working conditions.

I. GENERAL

"CORESLAB" is the trade name for a precast, prestressed hollowcore concrete plank manufactured by Coreslab Structures Atlanta Inc. This product utilizes an extrusion method with voids running continuously lengthwise. High strength steel prestressing tendons are used in predetermined locations throughout the length of the plank as required by design considerations. The plank is manufactured to a nominal 48" width as dictated by the extruding equipment. Typical units are cast in 500' long beds that are subsequently cut to lengths according to job requirements. Sides are normally cast with a grout key configuration and a radius bottom chamfer.

Widths less than 48" require special cutting or splitting as do skewed end cuts, notches, holes, etc. Shop cuts are generally restricted to the sides or ends of the plank and are limited by shipping and handling stress concentrations that develop in the plank as a result of the cut.

Weld plates, horizontal reinforcement, lifting eyes and other embedments are not possible due to the extrusion manufacturing process. These and the other outlined properties and limitations affect the manner in which "CORESLAB" is shipped, handled and installed. Shipment is normally accomplished by 45' flatbed tractor-trailer rigs capable of hauling approximately 950, 775 and 700 sf of 6", 8", 10", 12" and 14" thickness, based upon unit weights 46, 57 and 63 psf respectively, which may be used in determining handling equipment capacity requirement at the jobsite and size of full shipments.

II. PRE-ERECTION STAGE:

- A. The Erector should familiarize himself with shop drawings, architectural and structural plans, and jobsite conditions, with particular attention to access requirements for the crane and delivering trucks, including over-head, surface and underground obstacles. The General Contractor is responsible for providing a stable surface for crane and truck mobility.
- B. Other trades should be made aware of the requirements for dimensional accuracy of supporting walls, beams, etc. uniform level bearing surfaces and anchorage locations. See attached "jobsite conditions" diagrams.
- C. Determine which point of the structure to use as a starting point and sequence of erection to prepare load lists for use by Coreslab Atlanta's Shipping Coordinator.
- D. Insure that the crew, crane, delivery, grout or grout materials and required tools are coordinated with the job schedule. "CORESLAB" plank and precast can usually be hoisted directly from the delivery truck to final position on the structure in one smooth, efficient operation with proper coordination, well within the usual two hour allowable free unloading time for timed deliveries. A typical schedule would provide for sequential truck arrivals one to two hours apart depending on complexity of job and number of pieces per truck load.

E. TOOL REQUIREMENTS:

For typical "CORESLAB" installations, the following minimum tool requirements should be available before work commences:

☐ Wheel Barrow	☐ 4' Level	☐ Patching/Leveling Materials
☐ Grout Bucket (1/2 cyd)	☐ Hydraulic Jack (6 ton or more)	☐ (Vinyl Patch, Portland Cement)
☐ Grout Box (Trough)	☐ Sledge Hammer	☐ Leveling Plate Assemblies
☐ Ladders for access	☐ 4# or 6# Hammer	☐ Chokers (4) - 1/2" dia x12' long,
☐ Sqr. End Shovels (2)	☐ Grinder w/ Concrete Discs	☐ double loop
☐ 18# Pinch Bars or similar (2)	☐ Electric Cords	☐ Shim Materials
☐ Floor Scrapers (12" min.) (3)	☐ Concrete Finishing Tools	☐ Bearing Pads (as required)
☐ Safety Gas Can for Saws	☐ String & Chalk Line	☐ Concrete Saw
☐ Tape Measure	☐ Brooms	☐ Hilti Nail Shot Gun w/ shots 1 1/2"

This list does not include safety gear as may be required by OSHA, the General Contractor, or as the site characteristics may dictate. However, Coreslab Structures recommends that all possible protections be taken to insure a safe project.

III. ERECTION STAGE:

- A. Depending on individual job requirements, erector shall arrange for a crane of adequate capacity with two ways cable rigging of sufficient length and capacity to handle the maximum length and weight of the plank. See attached drawing for correct rigging technique.
- B. Erection Subcontractor will check for readiness of the structure to receive "Coreslab" plank including spot checking spar width of the structure to match the Coreslab Structures shop drawings. Check for site conditions for crane and truck mobility. Check for any overhead obstructions especially power lines.
- C. Erector shall place "Coreslab" plank on supporting structure in conformance with shop drawings. All details indicated on shop drawings must be adhered to. Any deviation must be approved by Coreslab Structures Engineering.
- D. Erector shall notify Coreslab Atlanta Shipping Coordinator if any "Coreslab" plank is damaged upon arrival at jobsite. If the Shipping Coordinator is not available, the Project Manager shall be notified in order to initiate appropriate measures required for prompt replacement of damaged unit(s).
- E. "Coreslab" plank should never be hoisted into position by means of placing hooks or bars into the core areas.
- F. Any notching or cutting of "Coreslab" plank shall be done in a workmanlike manner. Notching or cutting may be necessary around building members that interfere with "Coreslab" placement. If the Erector is unfamiliar with plank erection and cutting, call Coreslab Structures Engineering for general and specific guidelines.
- G. Erection shall proceed in a workmanlike manner until completion of erection phase. Check for proper alignment of the plank according to the shop drawings before any leveling or grouting takes place.
- H. Erector shall furnish all materials required for erection, leveling, grouting or patching phases.
- I. Erector shall install steel hangers, when required. Hangers usually are furnished by Coreslab Structures.

See the attached detail on proper hanger installation.

IV. LEVELING STAGE:

- A. Leveling tolerances will be in accordance with PCI standards.
- B. Erector shall correct for differential camber in adjacent "Coreslab" slabs within tolerances by means of jacking and leveling plates at appropriate locations. Leveling plates must remain in place at least 24 hours after grout is applied to keyway between adjacent "Coreslab" planks before removal.
- C. The Erector shall provide for minor shimming at irregular bearing joints. Shimming of short planks next to long planks will be required to correct for differential camber.

V. GROUTING STAGE:

- A. Erector should be alert to replace defective units prior to grouting and to conduct a final check of leveling and alignment prior to grouting.
- B. All keyway joints between adjacent "Coreslab" planks should be fully grouted by erector with 3:1 sand and cement grout having an approximate 6" slump. Grout may be job mixed with portable mixer or purchased from ready mix suppliers. Wheel-barrows are normally used for delivery to a grout box or trough which is used to place grout in the keyways.
- C. The Erector shall remove excess grout from the top of the keyway joints using floor scrapers and shovels, leaving a flush and finished appearance to the joint.
- D. Erector shall remove excess grout from the bottom chamfer portion of "Coreslab" plank joints.
- E. Erector is responsible to clean up any grout that flows through keyway joint and falls to floor below.
- F. When "feathering" of keyway joints is required as part of the job specifications, the Erector shall taper the keyway grout pour away from the keyway so as to present a surface without sharp or noticeable vertical rises between slabs. The correction of "grout shrinkage" is the responsibility of the Erector.
- G. Erector shall properly form any openings as required to prevent grout from falling through using plywood and Hilti shots or other method.
- H. To calculate grout quantities required, use the table below.

Coreslab Thickness	Number of Cubic Yards per 100 Linear Feet of Keyway	Number of Cubic Yards per 1000 Square Feet of Area*
6"	.141	.353
8"	.220	.550
10"	.268	.670
12"	.296	.740

Allow an additional 25% for end joint grouting and waste.

*Based on 250 linear foot of keyway per 1000 square feet.

VI. REWORK STAGE:

- A. Erector shall grind any irregularities.
- B. All spalls, honeycomb, air pockets and other defects in excess of 3/8" in least dimension shall be filled with appropriate patching materials.
- C. Small defects shall be filled using sheetrock joint compound after above floor or roof has been dried in.

VII. PRECAUTIONS:

- A. Good construction practice must be maintained during erection and related operations.
- B. Do not lift plank with hooks in end or cores.
- C. Do not lift plank by means other than support at both end dunnage points. Units are not designed to be lifted exclusively at or near the middle.
- D. Plank should be supported only at the dunnage points at or near the ends if restacking is necessary. Dunnage should be kept in close vertical alignment and only identical units stacked together.
- E. End walls or other supports should be adequately braced to accommodate temporary loads if required.
- F. Planks must not be inverted.
- G. Prestress strands must not be cut unless shown on shop drawings or approved by Coreslab Structures Engineering.

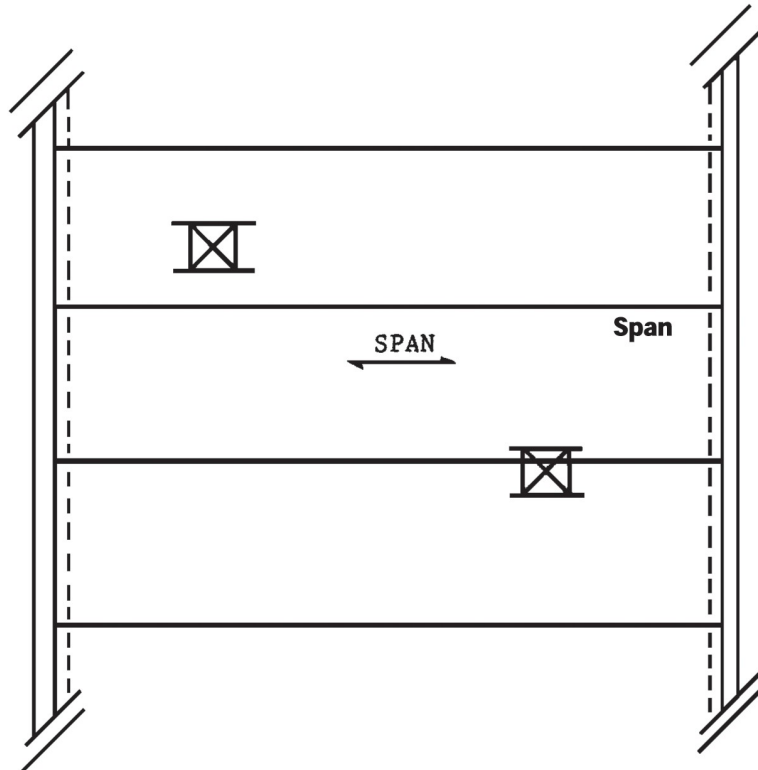
VIII. HOLE CUTTING:

All hole cutting should be approved by Coreslab Structures Engineering. Hole cutting shall only be done after the plank is set and grouted. Holes are generally laid out by the trades requiring them. Use the attached drawing as a guide on how to cut holes. Holes cutting more than 1 strand are usually undesirable and should be avoided if possible.

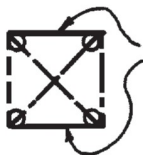
IX. DISCLAIMER:

THESE RECOMMENDATIONS ARE FURNISHED IN THE INTEREST OF GOOD CONSTRUCTION PRACTICE FOR TYPICAL, SIMPLE INSTALLATION. JOB REQUIREMENTS AND CONDITIONS MAY VARY. CORESLAB STRUCTURES (ATLANTA) INC. ASSUMES NO LIABILITY FOR ANY CLAIM, LOSS OR INJURY ARISING FROM INSTALLATION PRACTICES OR PROCEDURES CONDUCTED BY OTHERS, WHETHER OR NOT IN ACCORDANCE WITH THESE RECOMMENDATIONS.

Recommended Procedure for Cutting Opening in "Coreslab" Plank



Plan

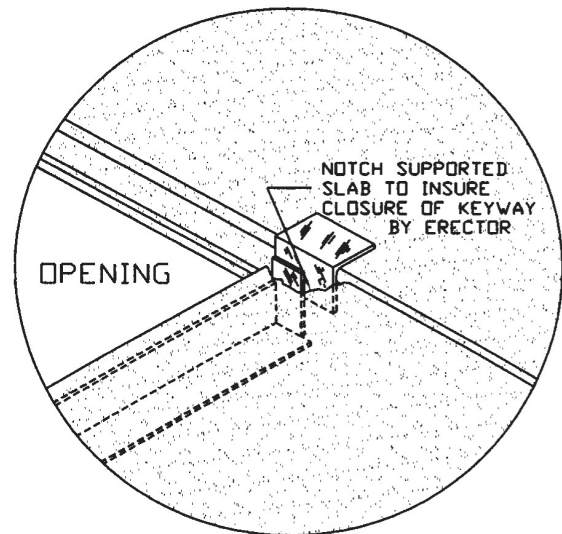
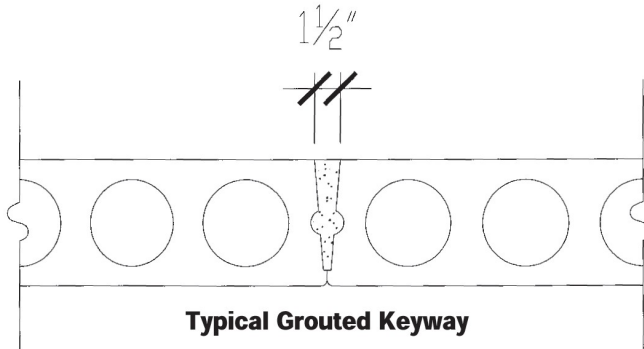
- Step #1  Grout all joints between slabs and allow to cure overnight before cutting any openings.
- Step #2  Field cut holes, other than those shown, must be approved by Coreslab Structures (Atlanta) Inc.
- Step #3  To minimize saw over-run in critical locations, drill a pilot hole through slab in each corner of proposed opening.
- Step #4  Saw cut opening edges running parallel with prestressing strands.
- Step #5  Saw cut opening edges running perpendicular to prestressing strands. Do not cut beyond pilot holes.

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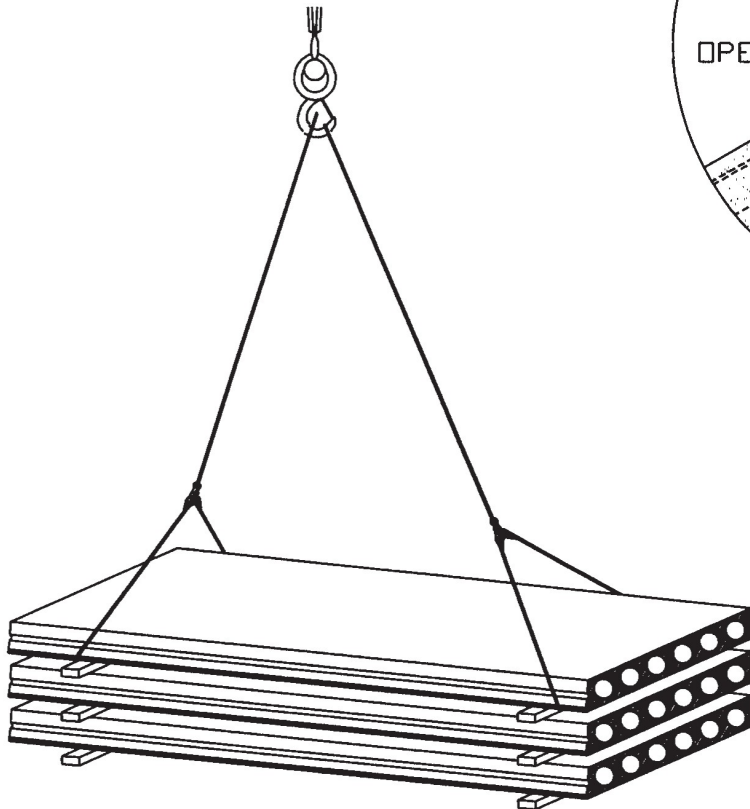
Note:

All joints between slabs shall be fully packed with grout consisting of 1-part Portland Cement to 3-parts clean sand.

Non-shrink grout is *not* recommended.

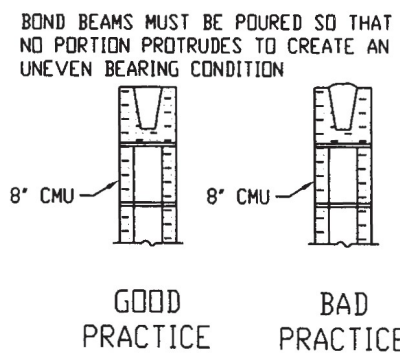
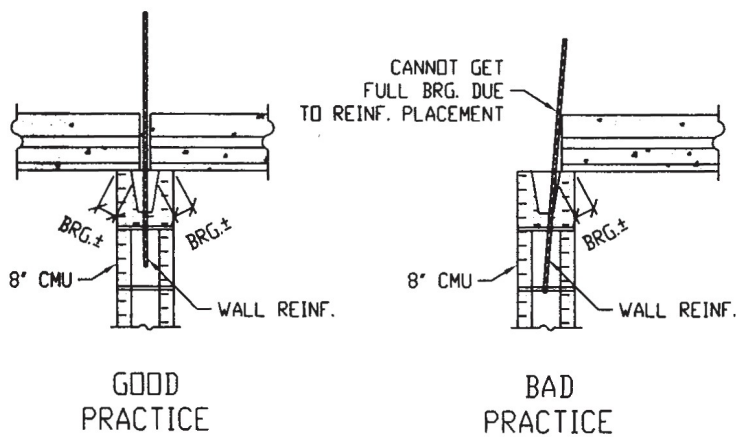
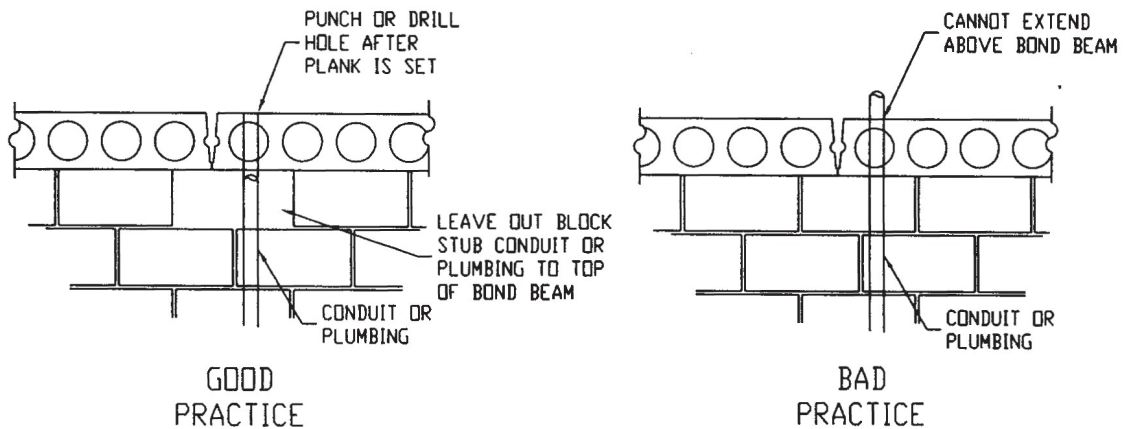
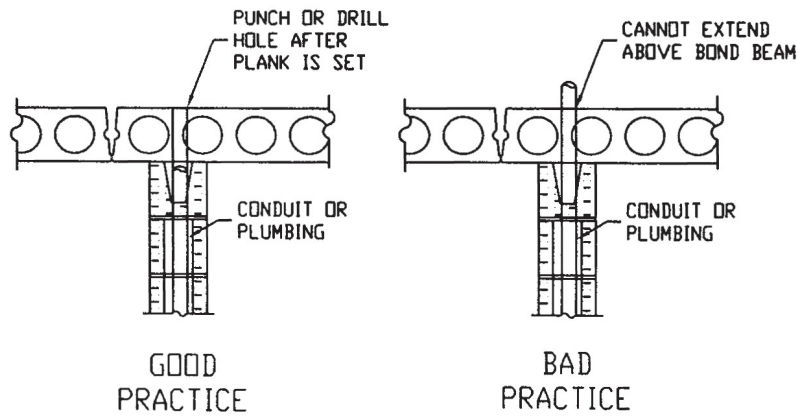


Hanger Detail

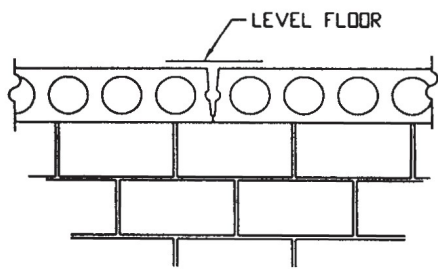


Typical Way to Lift Hollow Core

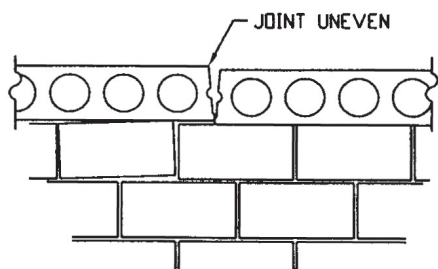
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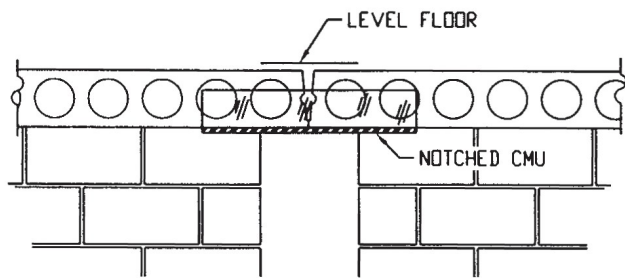
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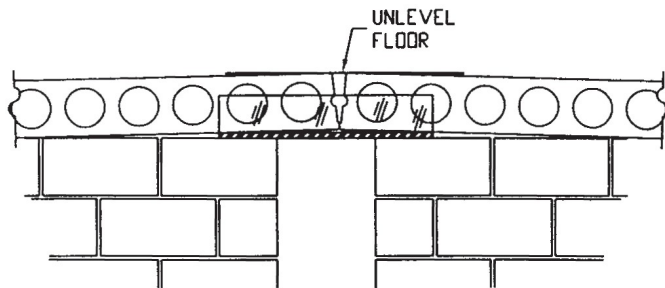
GOOD
PRACTICE



BAD
PRACTICE



GOOD
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