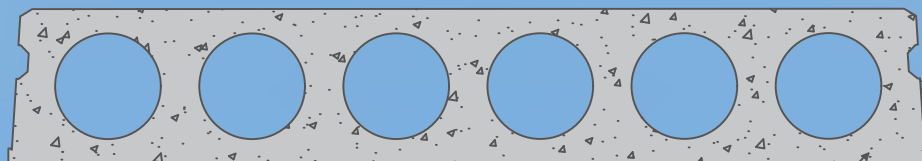


CORES LAB[®] STRUCTURES

(ORLANDO) INC.

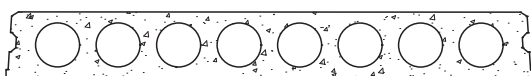


6" CORESLAB

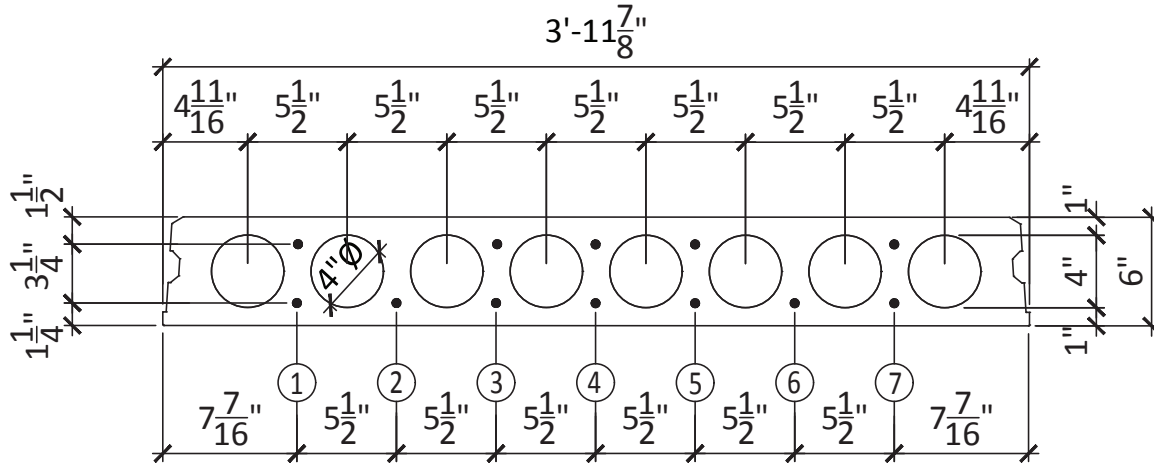
Span in feet	N (No top strands)									
	3		4		5		6		7	
7	*	*	*	*	*	*	*	*	*	*
8	550	*	*	*	*	*	*	*	*	*
9	448	*	530	*	540	*	551	*	561	*
10	373	520	471	*	480	*	489	*	498	*
11	315	439	422	588	431	600	439	*	448	*
12	271	376	364	505	390	543	396	550	406	558
13	235	326	318	439	356	495	363	502	370	509
14	206	285	279	386	327	454	334	461	340	467
15	182	251	248	342	293	419	308	425	314	431
16	162	223	222	304	259	372	286	394	292	400
17	142	194	195	266	231	328	258	367	272	372
18	123	167	170	232	207	291	231	330	254	348
19	106		149	202	188	256	208	295	227	327
20	93		131	173	166	223	188	264	201	295
21	81		115	146	148	192	171	237	179	266
22	70		102		131	165	155	206	160	240
23	61		90		115	141	139	179	144	216
24			80		102		124	155	129	189
25			70		90		111	134	116	166
26			61		80		99		105	145
27					71		88		95	126
28					63		79		85	109
29					55		70		76	
30							63		68	
31							56		60	
32							49		54	
33									48	
34									42	



*See reverse for notes and nomenclature.



6" CORESLAB



Physical Properties

6" CS Bare Unit

Wt. =	47 psf
A =	181.1 in ²
I =	749 in ⁴
Y _b =	2.98 in
Y _t =	3.02 in

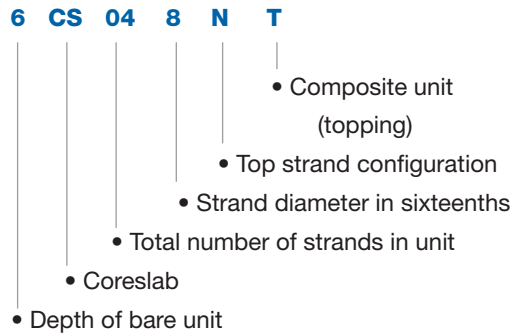
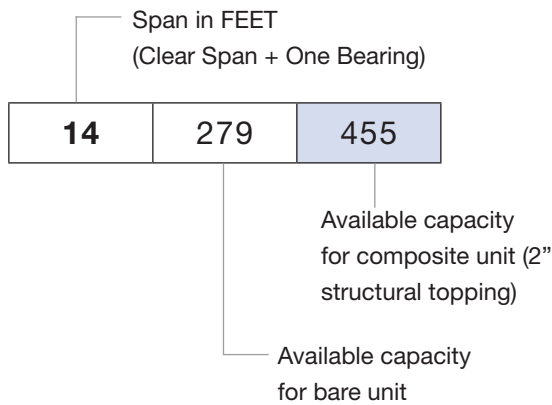
6" CS Composite Unit

Wt. =	72 psf
A =	275.1 in ²
I =	1779.8 in ⁴
Y _b =	4.35 in
Y _t =	3.65 in

Energy and Ecology Ratings

- Thermal resistance R = 1.07
- Sound transmission class STC = 49
- Impact insulation class IIC = 22
- Concrete strength: 5000 psi
- Topping concrete strength: 3000 psi
- Grout: sand/cement ratio: 3 : 1

Key to Coreslab Nomenclature

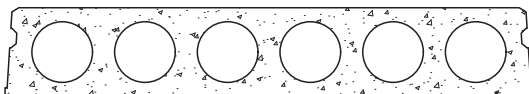


8" CORESLAB

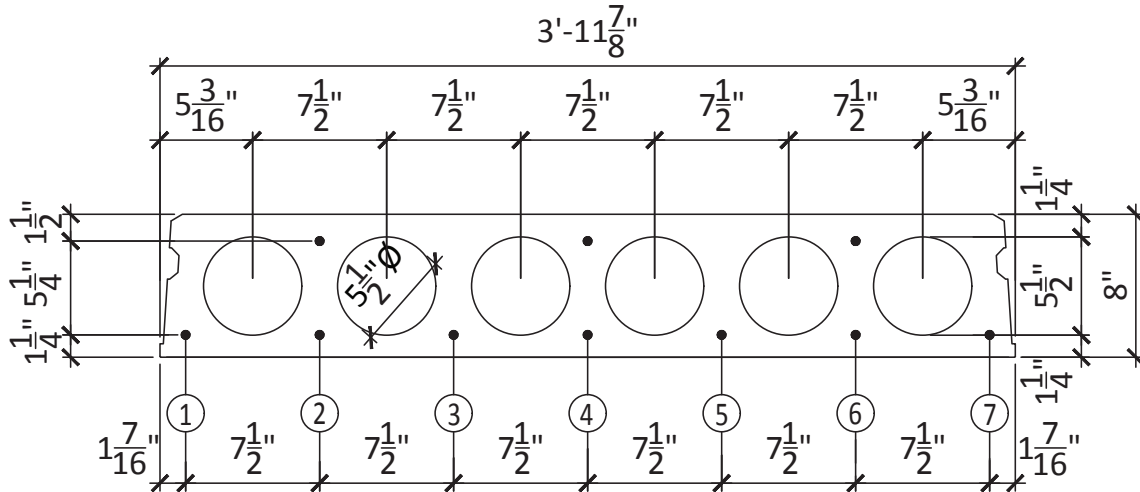
Span in feet	N (No top strands)									
	3		4		5		6		7	
7	*	*	*	*	*	*	*	*	*	*
8	*	*	*	*	*	*	*	*	*	*
9	*	*	*	*	*	*	*	*	*	*
10	546	*	*	*	*	*	*	*	*	*
11	463	586	566	*	578	*	589	*	*	*
12	399	503	512	*	523	*	533	*	544	*
13	347	437	467	591	477	*	486	*	496	*
14	306	384	415	521	437	556	446	564	455	572
15	271	340	370	463	404	513	412	520	420	528
16	242	302	332	414	374	475	382	482	390	489
17	213	265	293	364	344	442	356	449	363	455
18	185	229	256	318	308	401	333	419	340	425
19	161	199	225	278	277	353	310	393	319	399
20	141	173	199	245	251	313	280	365	300	375
21	124		176	216	226	278	254	330	281	353
22	109		156	191	202	247	232	299	256	333
23	96		139	170	181	221	212	269	234	302
24	84		124	151	163	198	195	242	215	276
25	74		111		146	177	180	218	198	252
26			99		132	156	163	195	182	231
27			88		119	136	148	172	169	209
28			79		107		133	152	157	185
29			71		97		120	133	143	165
30					87		108		129	146
31					78		98		117	129
32					69		88		106	114
33					62		79		96	
34							71		87	
35							63		79	
36							57		71	
37									64	
38									58	



*See reverse for notes and nomenclature.



8" CORESLAB



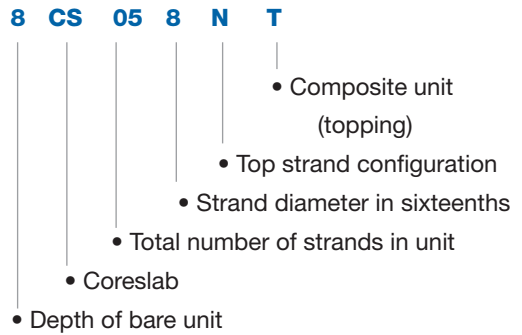
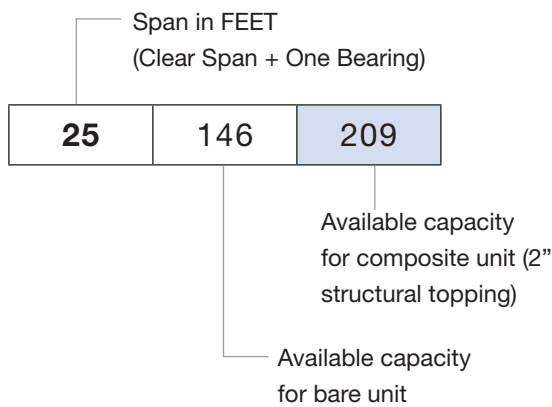
Physical Properties

8" CS Bare Unit		8" CS Composite Unit #	
Wt. =	61 psf	Wt. =	86 psf
A =	232.5 in ²	A =	326.0 in ²
I =	1736 in ⁴	I =	3459 in ⁴
Y _b =	3.96 in	Y _b =	5.40 in
Y _t =	4.04 in	Y _t =	4.60 in

Energy and Ecology Ratings

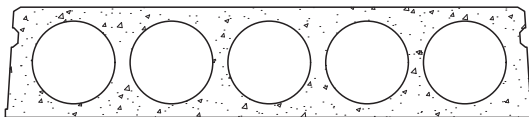
Thermal resistance R = 1.34
 Sound transmission class STC = 51
 Impact insulation class IIC = 27
 Concrete strength: 5000 psi
 Topping concrete strength: 3000 psi
 Grout: sand/cement ratio: 3 : 1

Key to Coreslab Nomenclature



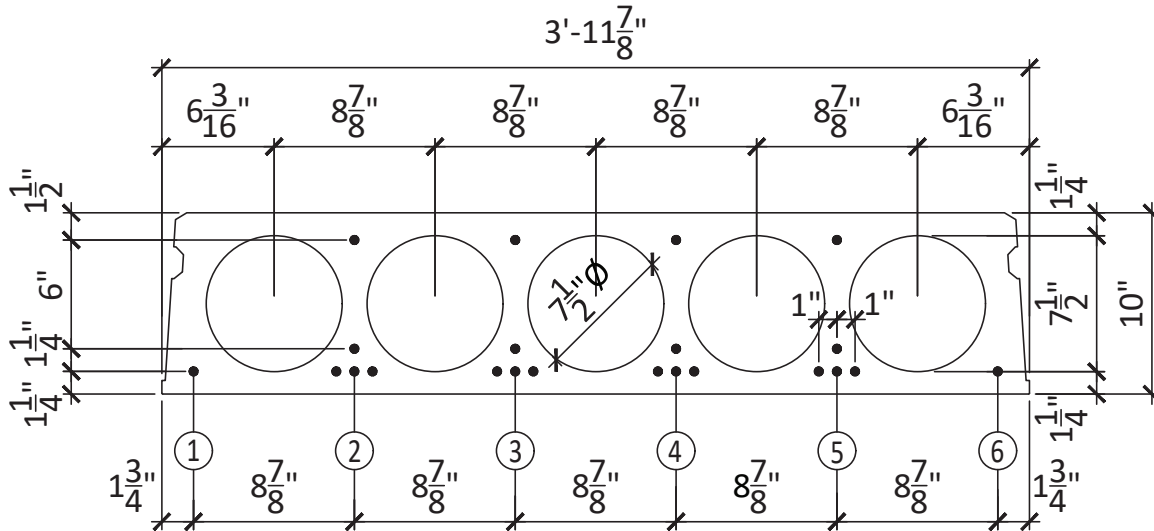
10" CORESLAB

Span in feet	N (No top strands)											
	4		5		6		7		8		9	
7	*	*	*	*	*	*	*	*	*	*	*	*
8	*	*	*	*	*	*	*	*	*	*	*	*
9	*	*	*	*	*	*	*	*	*	*	*	*
10	589	*	*	*	*	*	*	*	*	*	*	*
11	526	*	539	*	552	*	564	*	577	*	590	*
12	475	573	487	583	498	593	510	*	521	*	533	*
13	432	520	443	529	453	539	464	548	474	557	485	567
14	396	475	405	484	415	492	425	501	435	510	444	518
15	364	437	373	445	382	453	391	461	400	469	410	477
16	337	403	345	411	354	418	362	426	371	433	379	441
17	313	374	321	381	329	388	337	395	345	402	353	409
18	292	348	300	355	307	362	315	368	322	375	330	381
19	273	326	280	332	288	338	295	344	302	350	309	357
20	257	305	263	311	270	317	277	323	283	329	290	335
21	241	284	248	292	254	298	261	304	267	309	273	315
22	217	253	234	275	240	281	246	286	252	291	258	297
23	195	225	221	260	227	265	233	270	239	275	244	280
24	175	202	210	246	215	251	221	256	226	261	232	265
25	157	181	198	233	204	238	209	242	215	247	220	252
26	142	162	182	213	194	226	199	230	204	235	209	239
27	128	145	168	193	185	215	190	219	195	223	200	228
28	116		154	175	175	204	181	208	186	213	190	217
29	104		140	158	162	190	173	199	177	203	182	207
30	94		128	144	150	175	165	190	170	194	174	197
31	85		117	130	140	161	156	181	162	185	167	189
32	77		106		130	149	146	169	156	177	160	181
33	70		97		121	135	136	156	149	169	153	173
34			89		113		127	145	140	162	147	166
35			81		105		118	134	131	151	142	159
36			74		96		111	121	123	140	135	153
37			67		89		103		115	130	127	145
38					81		97		108	119	119	135
39					73		90		101	107	111	126
40					67		83		95		103	117
41							76		89		96	106
42							69		83		89	
43							63		77		83	
44									70		77	
45									64		71	
46									59		66	
47									54		60	
48											55	



*See reverse for notes and nomenclature.

10" CORESLAB



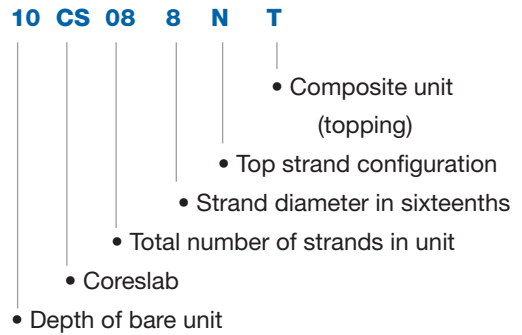
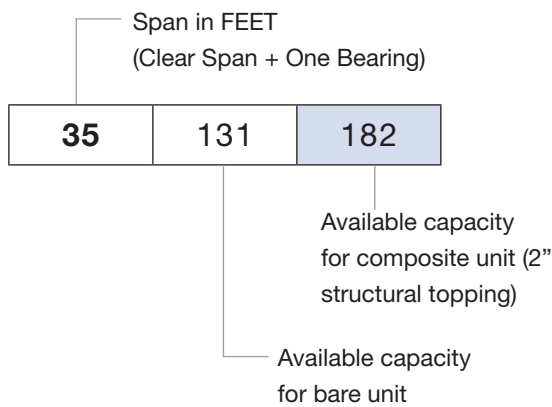
Physical Properties

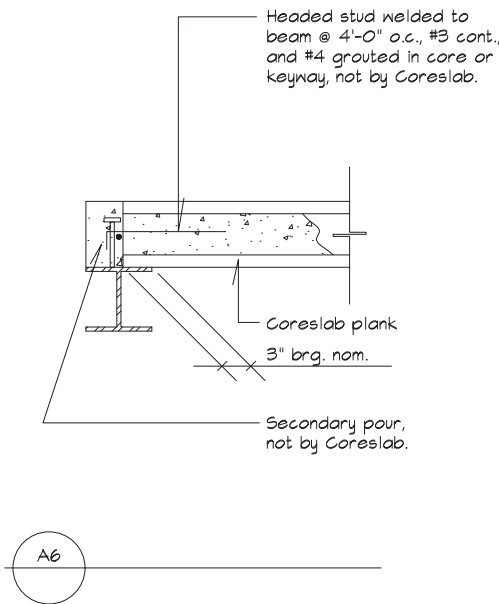
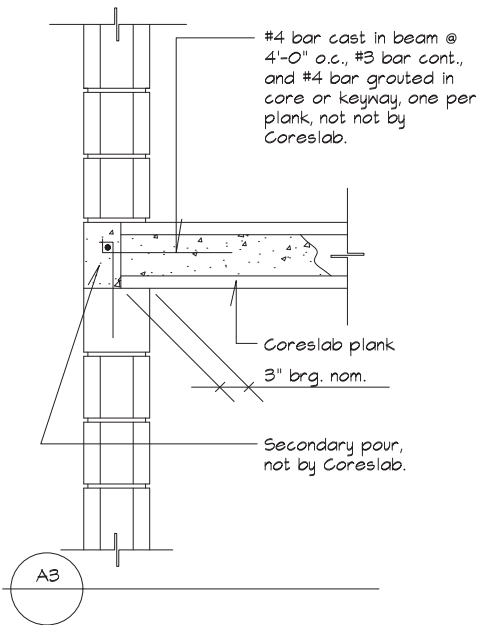
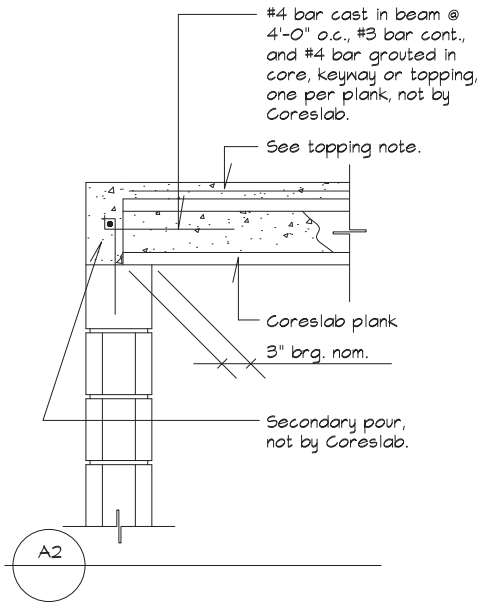
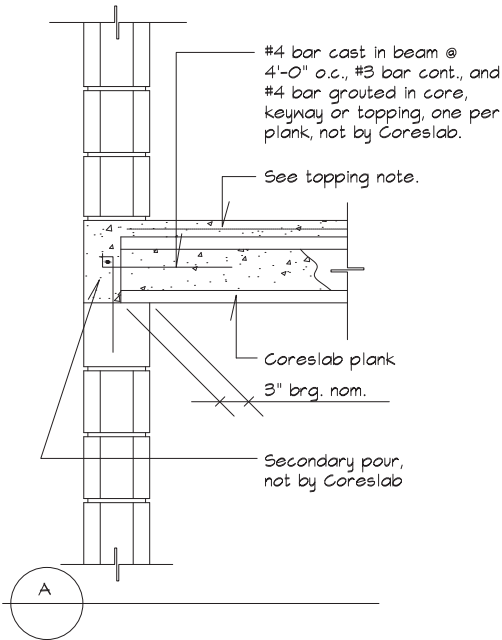
10" CS Bare Unit		10" CS Composite Unit #	
Wt. =	65 psf	Wt. =	90 psf
A =	247.1 in ²	A =	340.1 in ²
I =	3127 in ⁴	I =	5642.2 in ⁴
Y _b =	4.93 in	Y _b =	6.59 in
Y _t =	5.07 in	Y _t =	5.41 in

Energy and Ecology Ratings

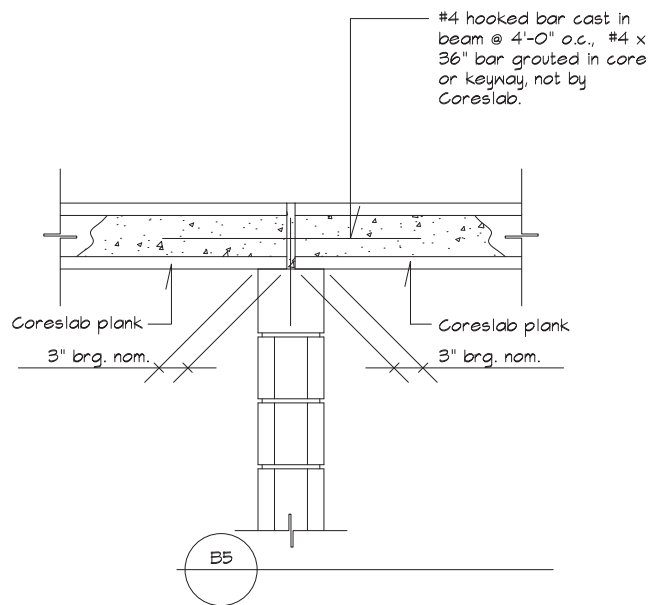
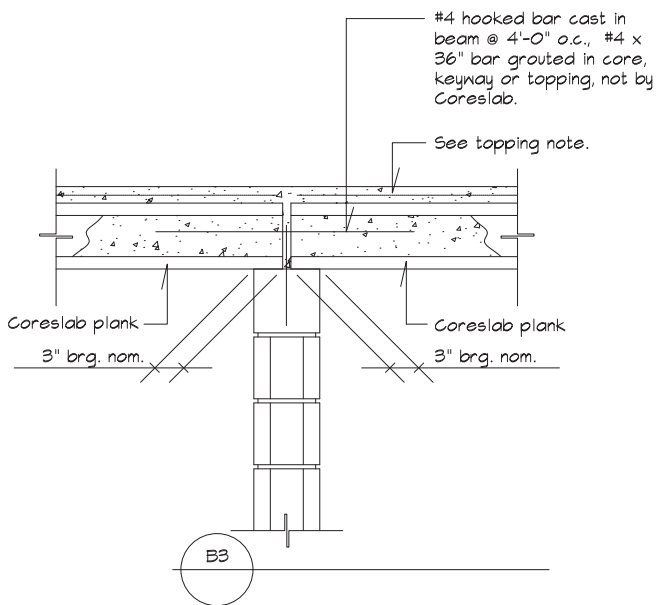
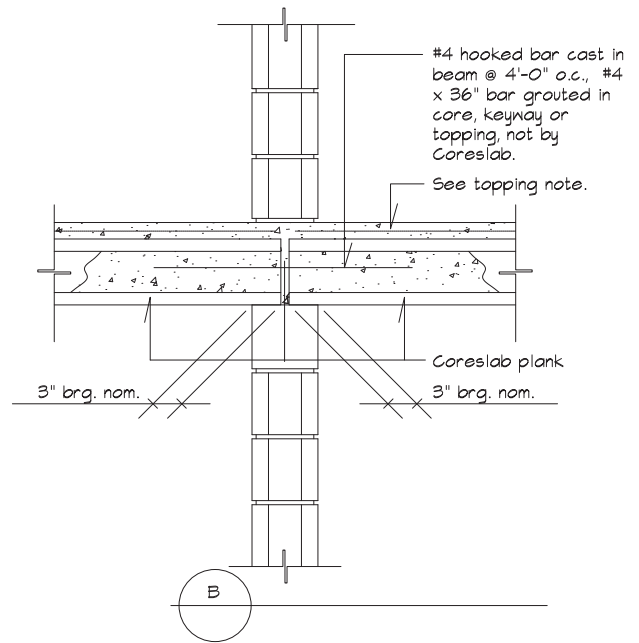
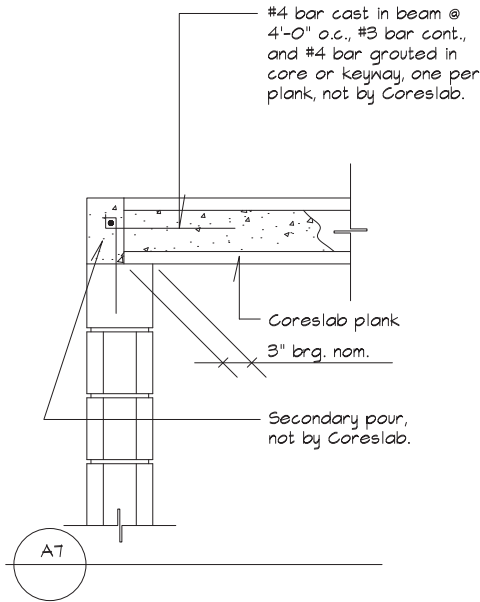
- Thermal resistance R = 1.73
- Sound transmission class STC = 52
- Impact insulation class IIC = 31
- Concrete strength: 5000 psi
- Topping concrete strength: 3000 psi
- Grout: sand/cement ratio: 3 : 1

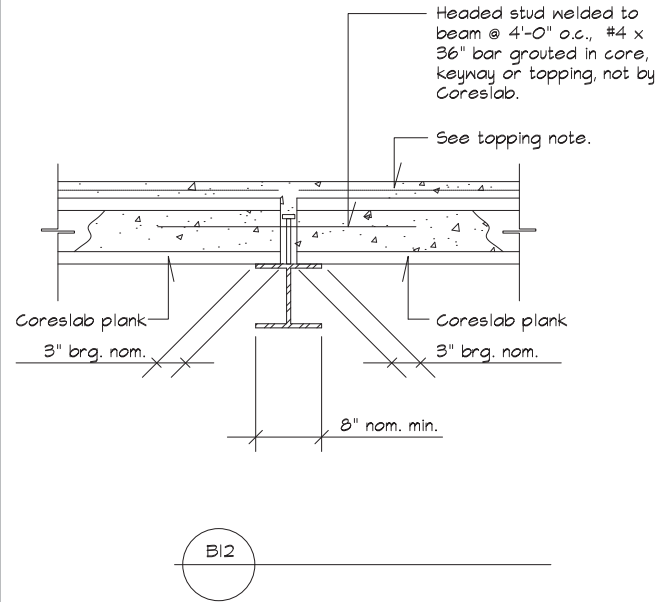
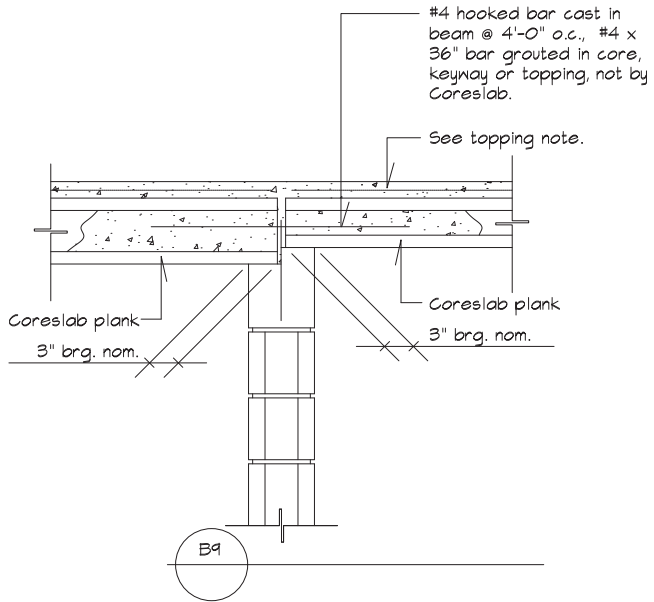
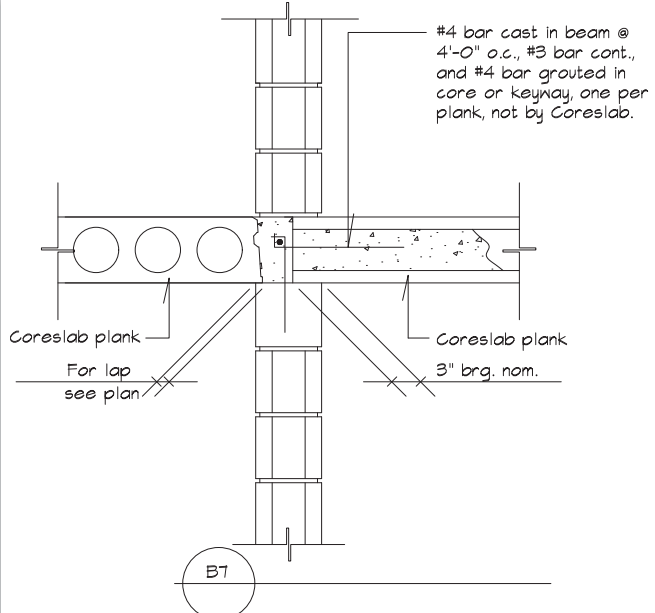
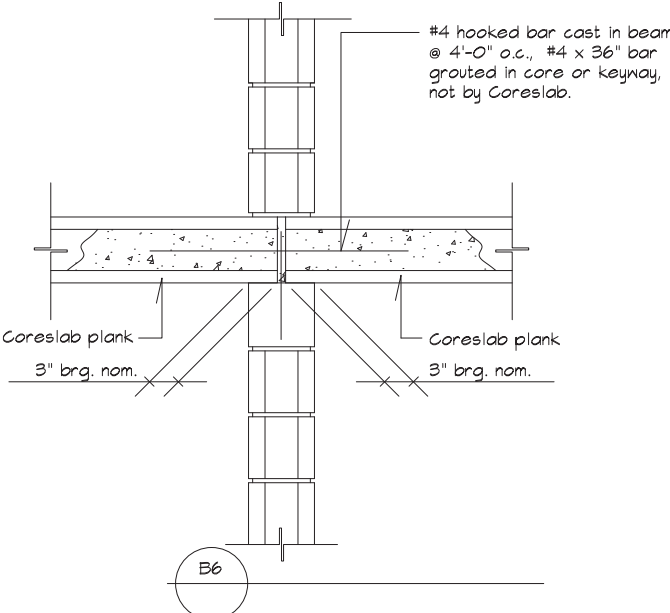
Key to Coreslab Nomenclature



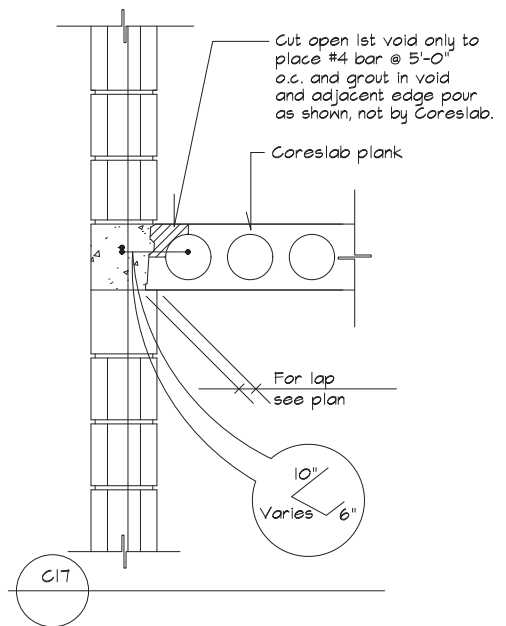
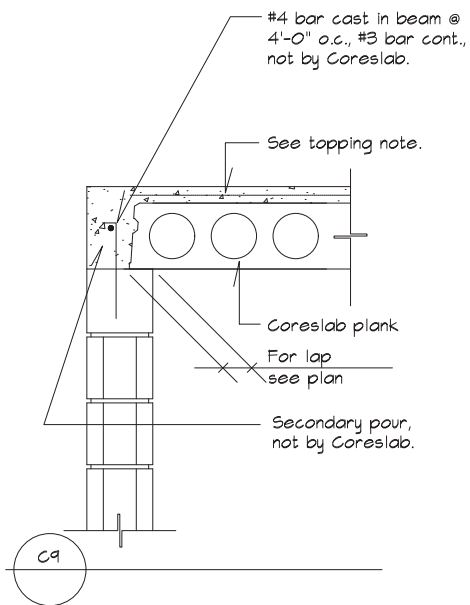
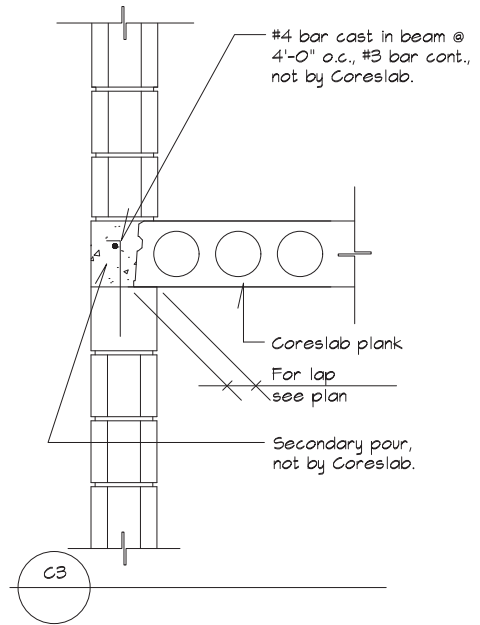
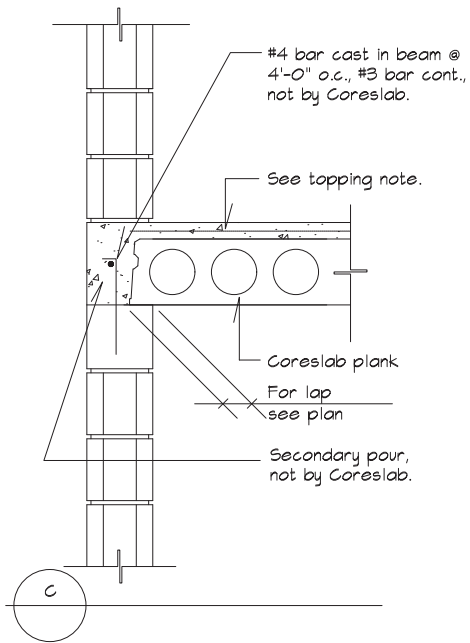


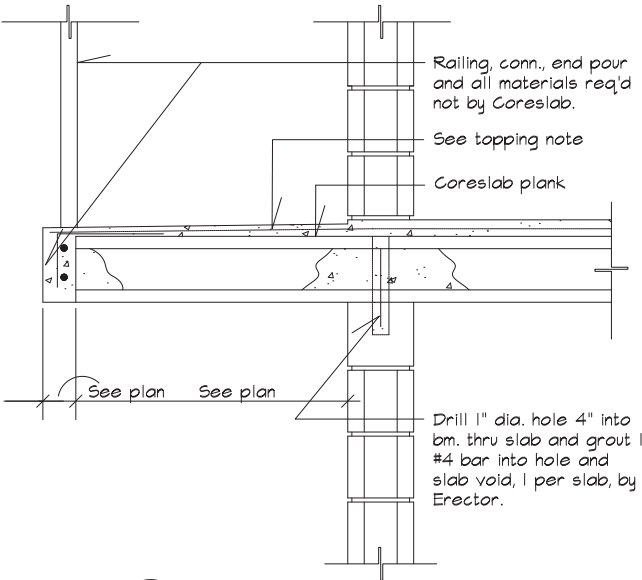
STANDARD DETAILS



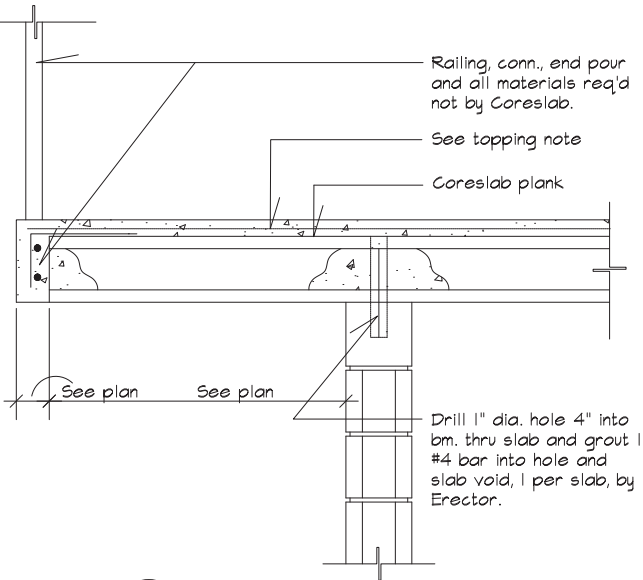


STANDARD DETAILS

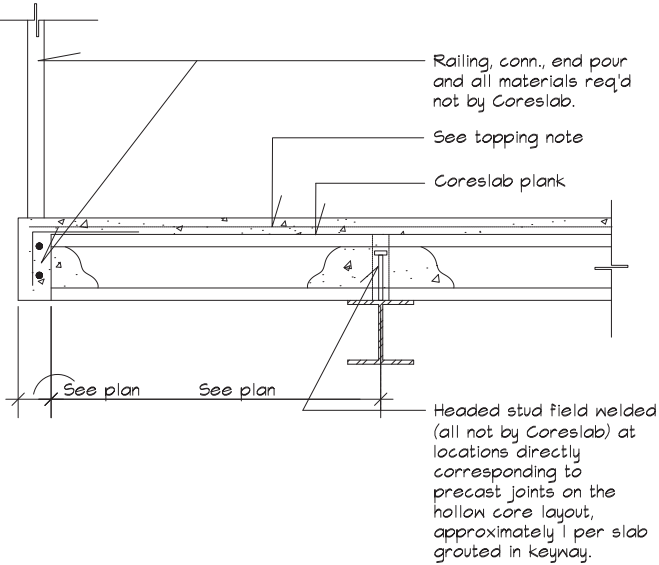




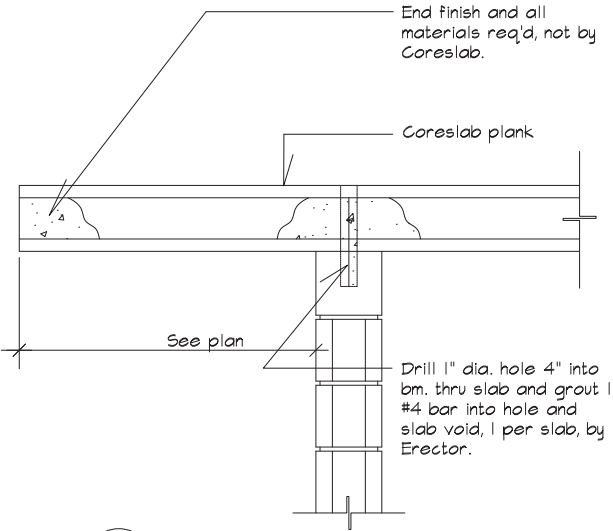
D1



D6

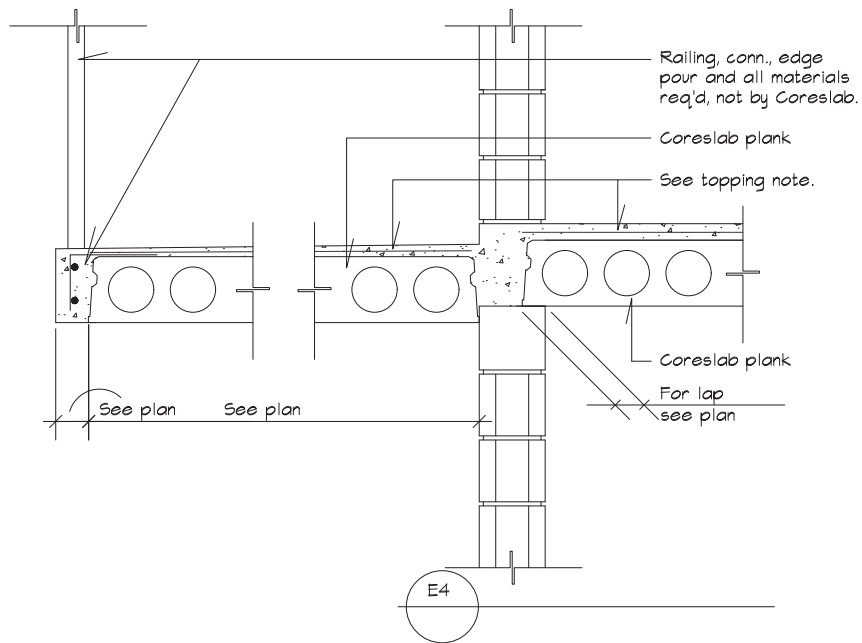
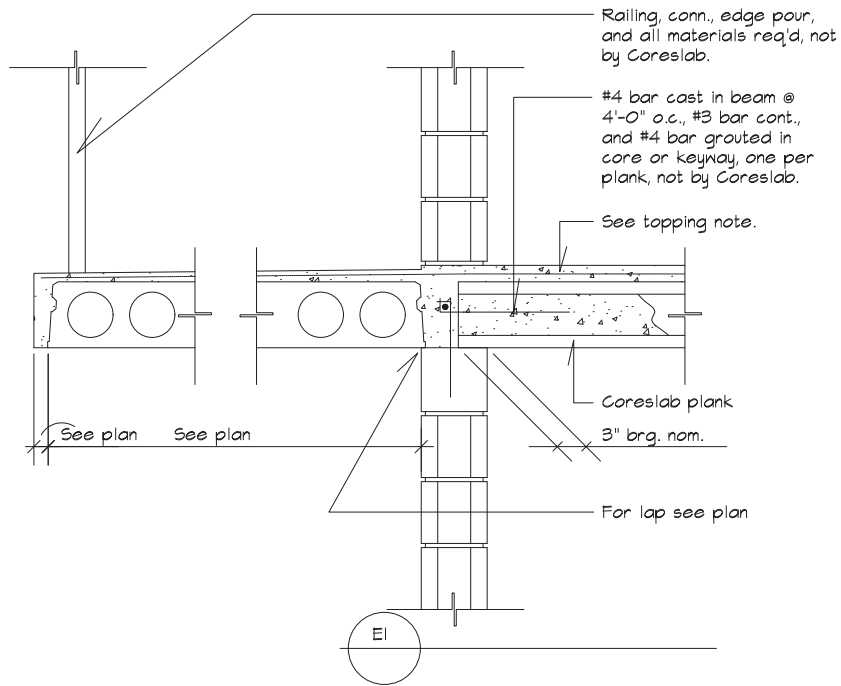


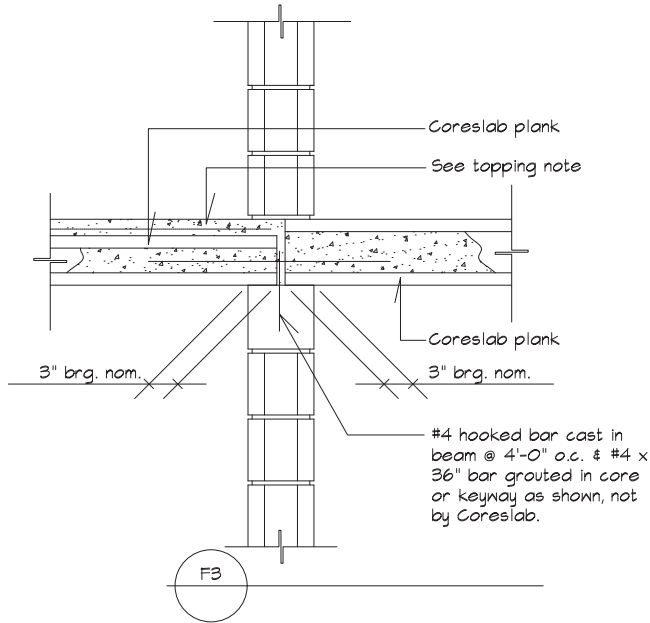
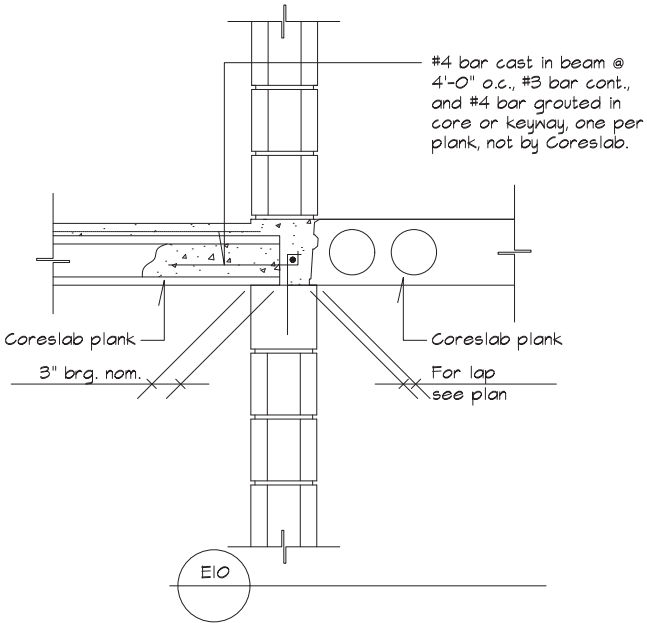
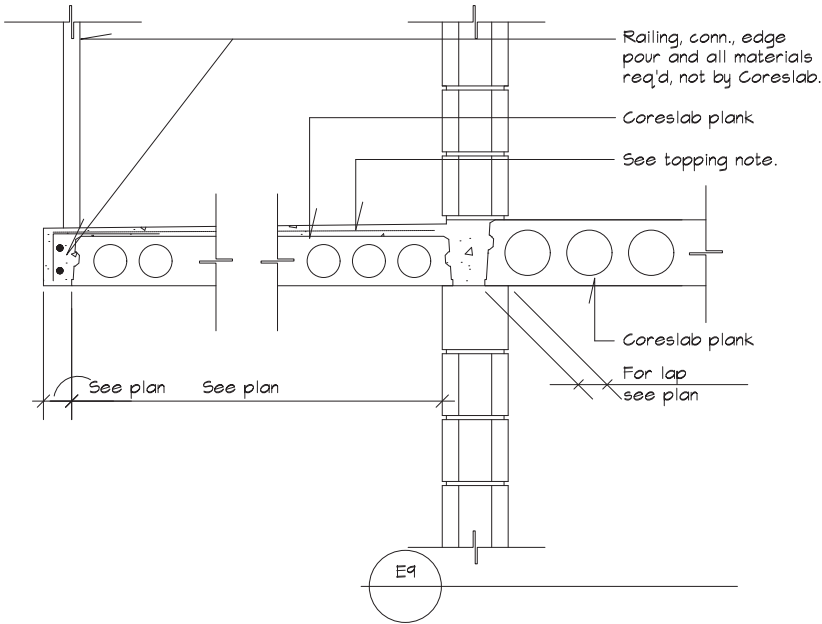
D7



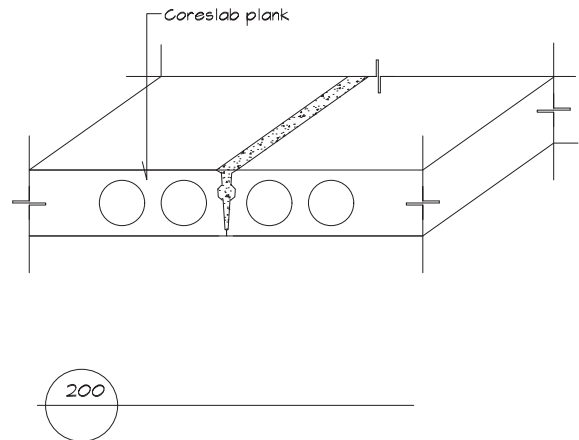
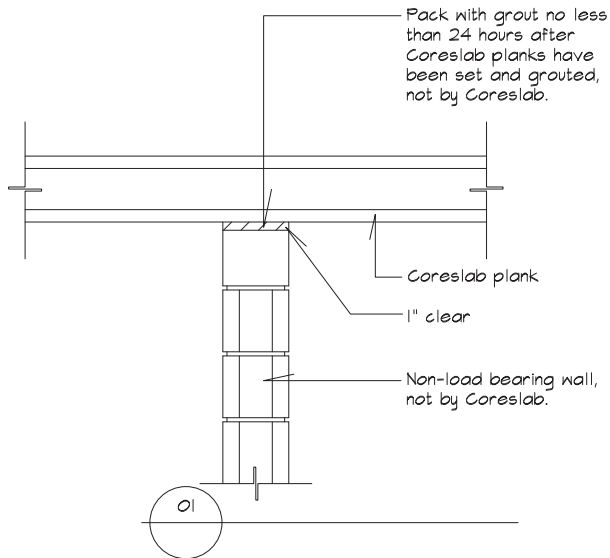
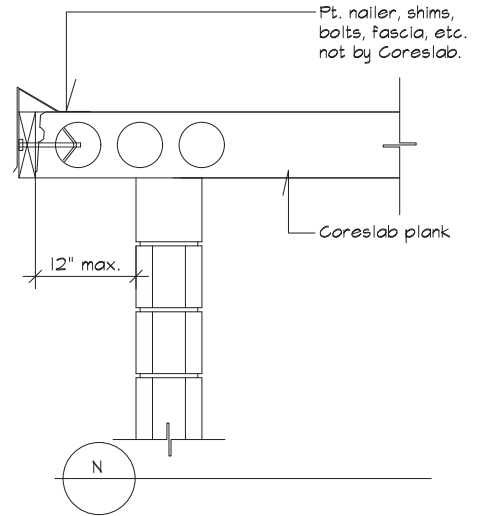
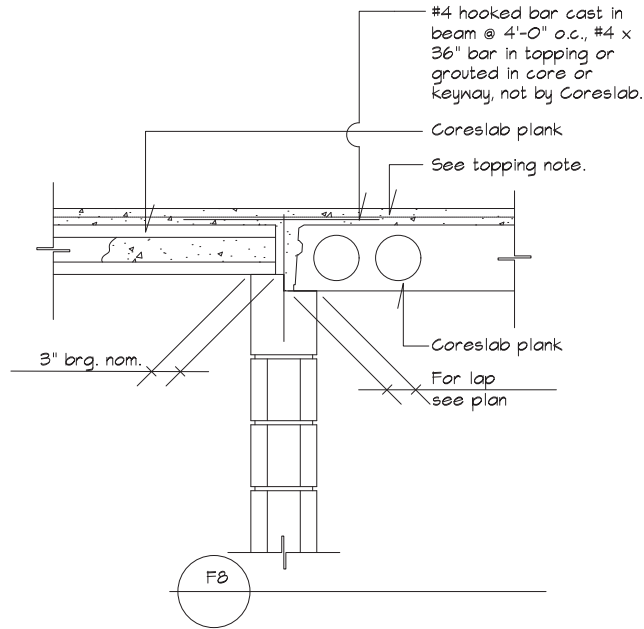
D8

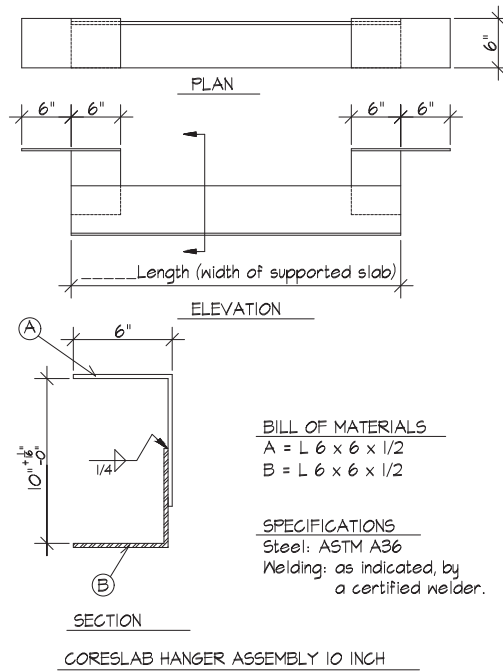
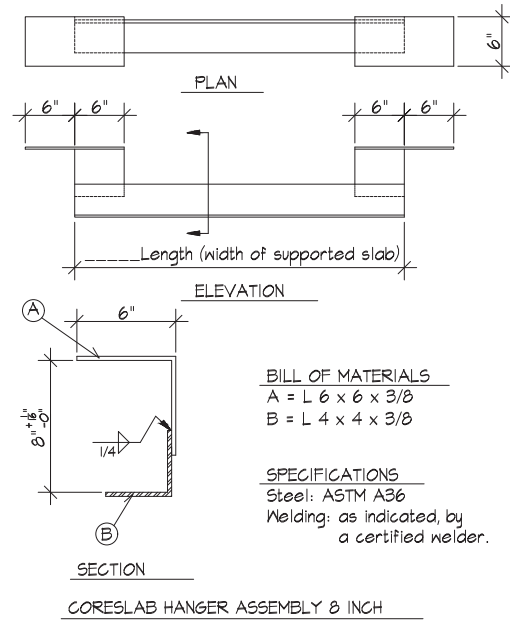
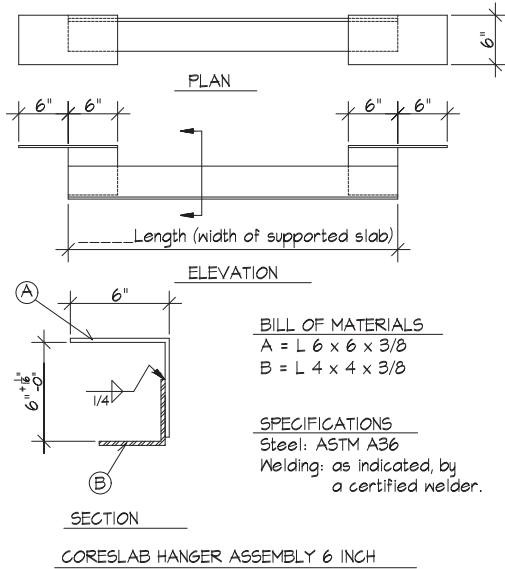
STANDARD DETAILS





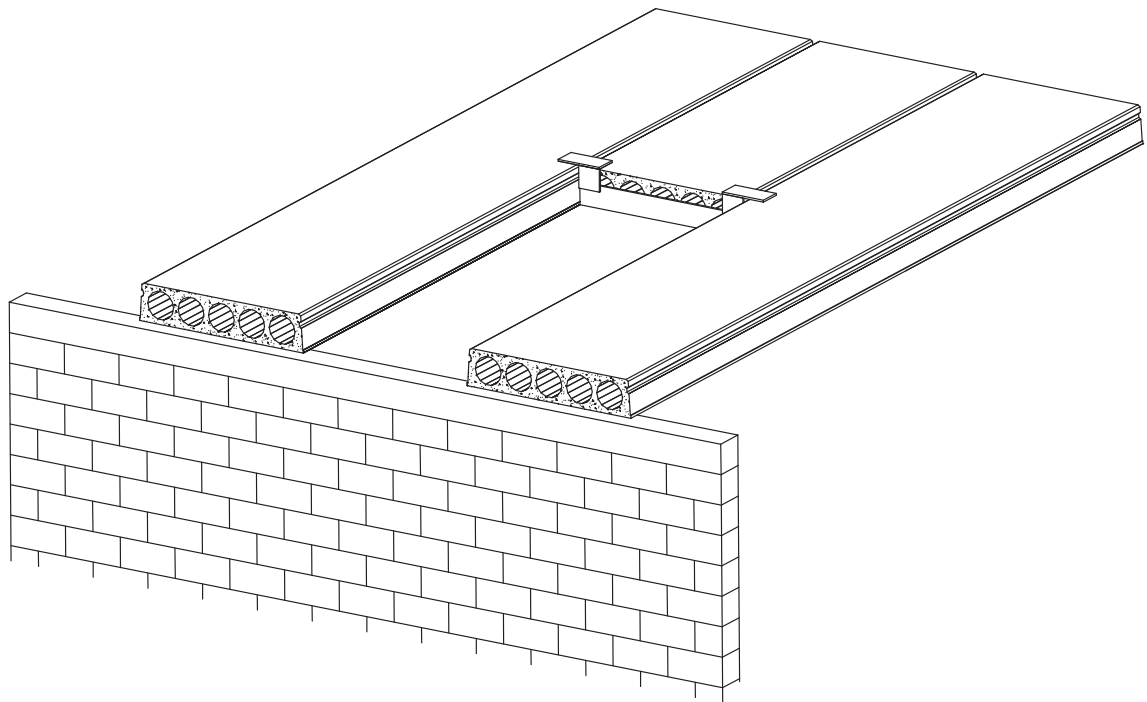
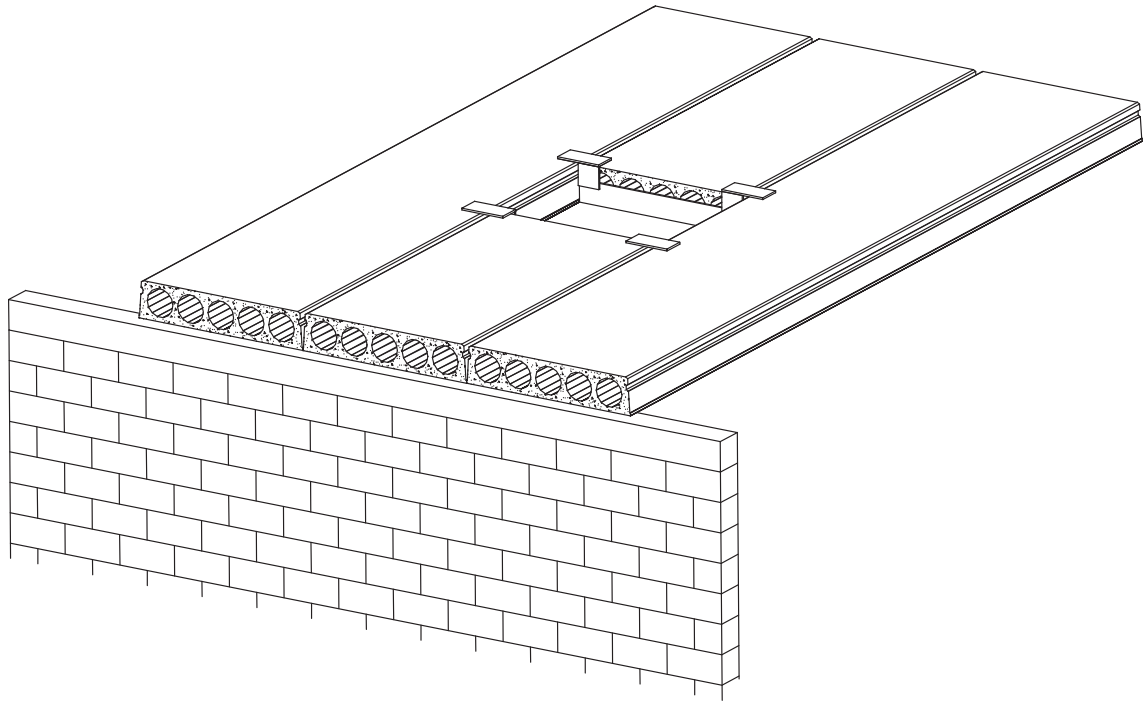
STANDARD DETAILS



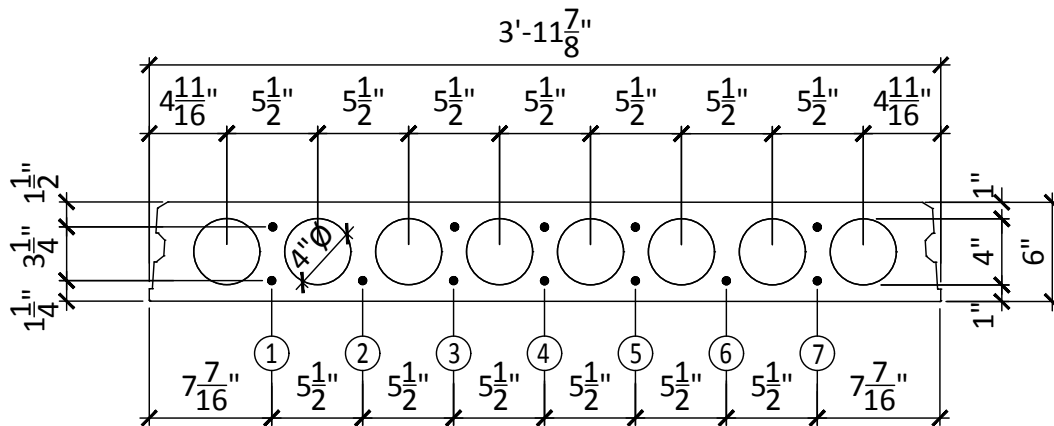


Hanger components may vary in size depending upon project requirements.

OPENINGS UTILIZING STEEL HANGERS



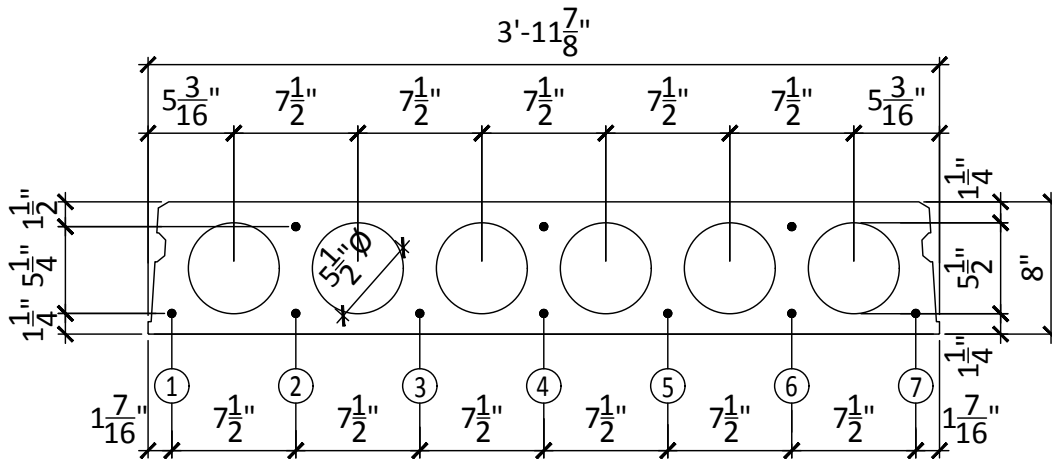
6" CORESLAB



NOTE: ALL STRANDS ARE 1/2" DIA. 7 WIRE.

6" CORESLAB STRAND PATTERNS								
CORESLAB UNIT		STRAND LOCATIONS						
CODE	STRAND	1	2	3	4	5	6	7
N	3	•			•			•
	4	•		•		•		•
	5	•		•	•	•		•
	6	•	•	•		•	•	•
	7	•	•	•	•	•	•	•

8" CORESLAB

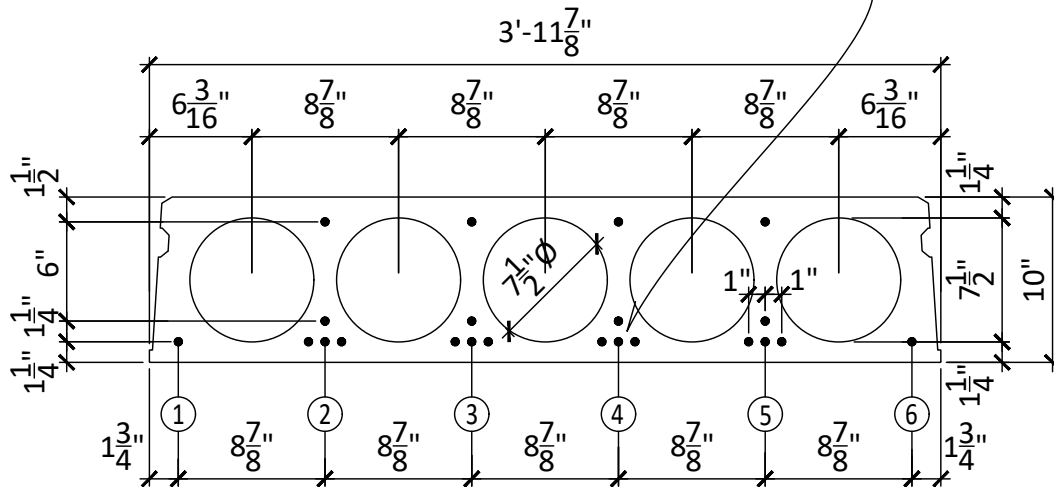


NOTE: ALL STRANDS ARE 1/2" DIA. 7 WIRE.

8" CORESLAB STRAND PATTERNS								
CORESLAB UNIT		STRAND LOCATIONS						
CODE	STRAND	1	2	3	4	5	6	7
N	3		•		•		•	
	4		•	•		•	•	
	5		•	•	•	•	•	
	6		•	•	•	•	•	•
	7	•	•	•	•	•	•	•

10" CORESLAB

NOTE: Center strand not used when multiple strand (alternate spacing) specified.



NOTE: ALL STRANDS ARE 1/2" DIA. 7 WIRE.

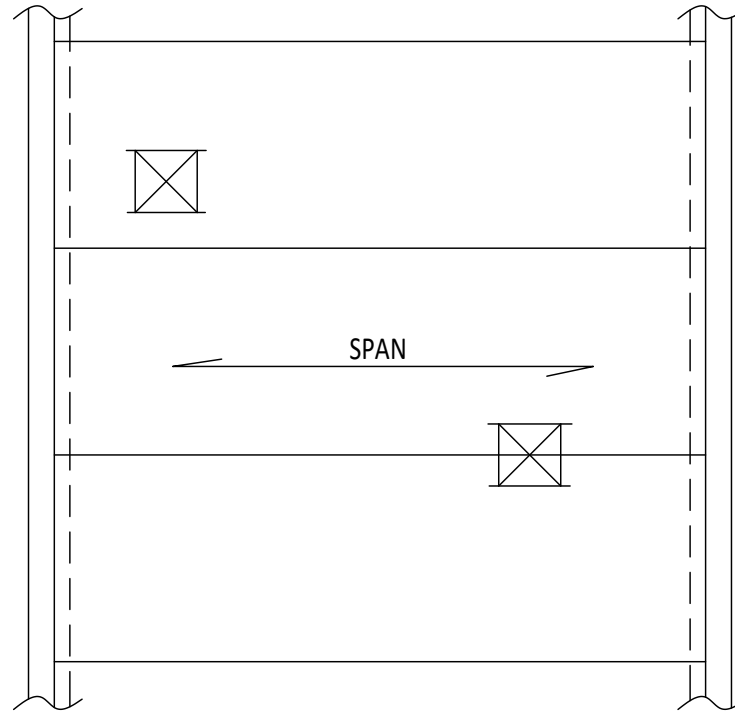
10" CORESLAB STRAND PATTERNS							
CORESLAB UNIT		STRAND LOCATIONS					
CODE	STRAND	1	2	3	4	5	6
N	4		.	.	.	.
	5		.	.	.	.
	6	.	.	.	.	.	.
	7	.	.	.	.	.	.
	8	.	.	.	.	.	.
	9	.	.	.	.	.	.

CORESLAB CUTTING INCREMENTS



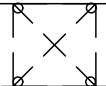
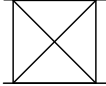
6"			8"			10"		
1	4 ³ / ₄ "	±2"	1	5 ¹ / ₄ "	±2 ¹ / ₂ "	1	6 ¹ / ₄ "	±2 ¹ / ₂ "
2	10 ¹ / ₄ "	±2"	2	1'-0 ³ / ₄ "	±2 ¹ / ₂ "	2	1'-3"	±2 ¹ / ₂ "
3	1'-3 ³ / ₄ "	±2"	3	1'-8 ¹ / ₄ "	±2 ¹ / ₂ "	3	2'-0"	±2 ¹ / ₂ "
4	1'-9 ¹ / ₄ "	±2"	4	2'-3 ³ / ₄ "	±2 ¹ / ₂ "	4	2'-8 ³ / ₄ "	±2 ¹ / ₂ "
5	2'-2 ³ / ₄ "	±2"	5	2'-11 ¹ / ₄ "	±2 ¹ / ₂ "	5	3'-5 ³ / ₄ "	±2 ¹ / ₂ "
6	2'-8 ¹ / ₄ "	±2"	6	3'-6 ³ / ₄ "	±2 ¹ / ₂ "			
7	3'-1 ³ / ₄ "	±2"						
8	3'-7 ¹ / ₄ "	±2"						

NOTE: TOLERANCE MAY BE INCREASED TO SUIT PLANT MEASUREMENTS.

RECOMMENDED PROCEDURE FOR CUTTING OPENINGS IN CORESLAB PLANK



PLAN

- STEP #1  Field cut holes, other than those shown on plans, must be approved by Coreslab Engineering Dept.
- STEP #2  Drill a pilot hole thru slab at each corner of proposed opening.
- STEP #3  Saw cut opening edges running parallel with prestressing strands.
- STEP #4  Sawcut opening edges running perpendicular to prestressing strands. Do not cut beyond pilot holes.

SPECIFICATIONS FOR CORESLAB HOLLOW CORE SLABS

1. GENERAL:

1.1 Furnish all labor and materials for the manufacturer, delivery and installation of Coreslab hollow core as specified herein and shown on drawings.

2. APPLICABLE PUBLICATIONS:

2.1 American Concrete Institute (ACI), latest issue

2.2 American Society for Testing and Materials (ASTM), latest issue

2.3 PCI Manual for Quality Control MNL116, latest issue

2.4 PCI Manual for the Design of Hollow core Slab, latest issue

2.5 Florida Building Code, latest issue

3. QUALIFICATIONS:

3.1 Manufacturer shall be a firm specializing in providing prestressed concrete products and service of the types specified herein; and shall have a proven background of experience and record of performance in the fabrication of prestressed hollow core of the quality and scope required on this project.

3.2 Manufacturer shall be PCI Plant Certified.

3.3 Fire Resistance Rated Prestressed Units: Where prestressed concrete units are shown or scheduled as requiring a fire resistance classification, provide units that are designed by the PCI Rational Method of Design as specified in the Florida Building Code. Standard units provide one hour fire resistance.

4. TESTING

4.1 Manufacturer shall make and test concrete compression specimens representative of the work in accordance with ASTM C-192, latest issue.

5. SUBMITTALS

5.1 Shop drawings shall be submitted for approval prior to fabrication, showing identifying marks of each unit, openings requiring hangers (other than plumbing and electrical) and anchorage details.

5.2 Design calculations shall be submitted with shop drawings when required, signed and sealed by a Registered Engineer licensed in the State of Florida.

SPECIFICATIONS

6. MATERIALS

6.1 Concrete Materials

6.1.1 Portland Cement Type I/II or III shall conform to ASTM C-150

6.1.2 Aggregates - ASTM C-33 or C-330

6.1.3 Concrete shall be zero slump.

6.2 Prestressing steel: Uncoated seven wire, 1/2" diameter lo-lax strand (270 KSI) conforming to ASTM-416. The wire shall be free of substances which would prevent bond to concrete.

7. FABRICATION

7.1 Prestressed concrete hollow core shall be machine extruded in one single operation on long production lines in 4'-0" nominal widths.

7.2 Openings

7.2.1 Openings 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 the prestressed concrete manufacturer.

8. TOLERANCES

8.1 Provide units with tolerances recommended by the Prestressed Concrete Institute's "Manual for Quality Control for Plants and Production of Precast Prestressed Concrete Products."

8.2 Tolerances

Width Full Units +/-1/4"

Width Sawcut Units +/-1/2"

Deviation from Square +/-1/4"

Length +/-1/2"

Thickness +/-1/4"

9. ERECTION

9.1 Prestressed concrete units shall be erected into final position under the supervision of the manufacturer or erector experienced in the installation of the type of units specified herein.

9.2 Product not hauled or erected by the manufacturer will not be the responsibility of Coreslab.

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. This operation is to be performed prior to units being loaded or ends restrained.

10.2 Keyways between units shall be cleaned and filled solidly with grout. Grout that may have seeped through to surface areas below shall be removed before hardening.

10.3 Grout for joints shall be mixed in proportions of one part portland cement and three parts sand and shall have a consistency allowing joints to be completely filled.

10.4 Tops of grout joints shall be adequately smooth to prevent any unevenness that might interfere with the placing of carpet with a suitable separate pad, or roofing. Transitions due to differential levels should be finished not steeper than 1:12. When installing tile or linoleum, slabs should have a leveling course before applying finished floor covering, not by Coreslab.

11. TOPPING

11.1 Where structural topping is to be applied, slabs are to be thoroughly cleaned and prepared by General Contractor prior to pouring to insure adequate bond. Structural concrete topping shall have a minimum strength of 3000 psi at 28 days.

11.2 The thickness of such topping at the center of span shall be the thickness shown on the drawings and may vary due to camber from the center to the supports as required for a level surface.

11.3 The design of supplemental reinforcing steel to be placed in the topping to satisfy certain design requirements is not by Coreslab.

12. FINISHING

12.1 Prestressed concrete slabs shall have a plant finish as indicated on the drawings. It is the responsibility of the General Contractor to make sure adequate preparations are made regarding sealing of slabs, etc. to ensure proper coverage of specified ceiling finish.

13. LOADING

13.1 Construction loads are not to exceed design loads.

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