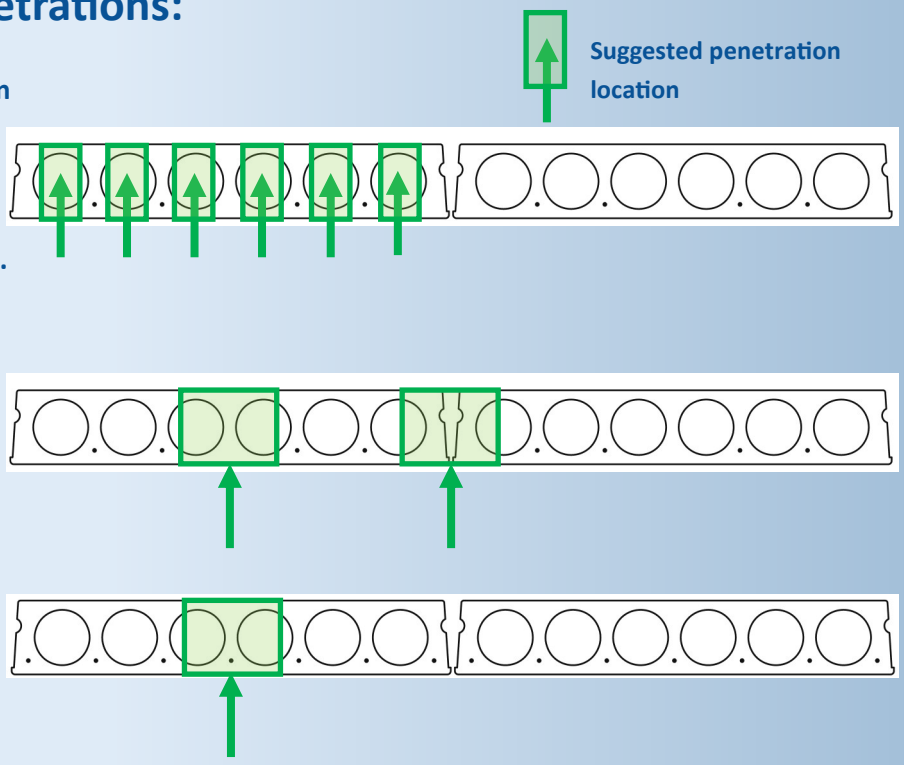
Field Penetrations in Hollow Core

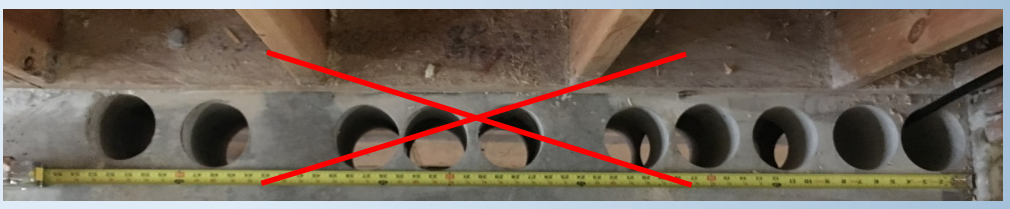
Order of Preference for Field Penetrations:



1. For smaller diameter penetrations, place penetration at a core location in plank. Penetration diameter must be smaller than core opening and/or will not cut strand. These penetrations may be placed as needed without further coordination with StresCore. Coordination with StresCore is required if multiple penetrations are to be placed in a single panel.
2. For larger penetrations, find a location where the strands will not be cut. Keyways or a location where a strand is not present are recommended.
3. If strands are present at multiple locations, orient penetration so that no more than one strand is cut. Generally a strand can be cut at ends of panels but may be problematic if cut at midspan. Additionally, it may be acceptable to cut a single strand as long as adjacent panels are undisturbed. Coordinate all strand cutting with StresCore prior to work.

Additional suggestions:

1. Top strands may be present in panels. These are generally required for handling and may be cut after panels are in place. If a panel has a cantilever or upward loads, DO NOT CUT these strands as they are required for design. Coordinate cutting any top strands with StresCore.
2. Generally, placing one penetration in a slab is not an issue. Multiple penetrations in each slab or multiple penetrations in adjacent slabs may impact the design capacity of the plank. Always coordinate multiple closely spaced openings with StresCore prior to any work.



Tight spaced penetrations should be avoided

3. Using AutoCad or plan dimensions should only be used as an initial guide. As-built geometry may vary by an inch or more from plans or CAD data due to tolerances in walls and support, erection, fabrication and joint spacing.
4. Multiple penetrations running lengthwise and along the same line in a panel are usually allowable. Multiple penetrations running transverse to the panel can lead to significant damage.
5. Do NOT strike or cut any prestressing strands without permission of StresCore, Inc. and the Architect/Engineer.
6. Contact the StresCore project manager for any questions. If the project manager is not available, other engineering staff are available to assist.

StresCore Inc.

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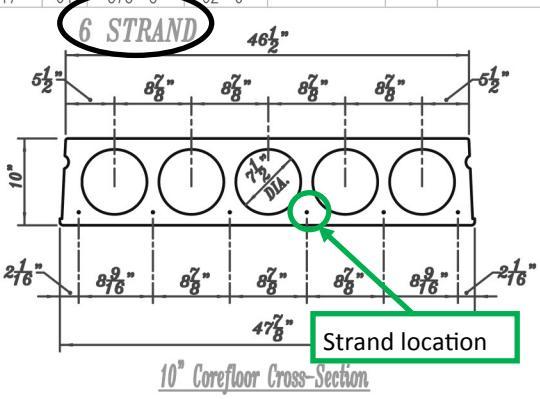
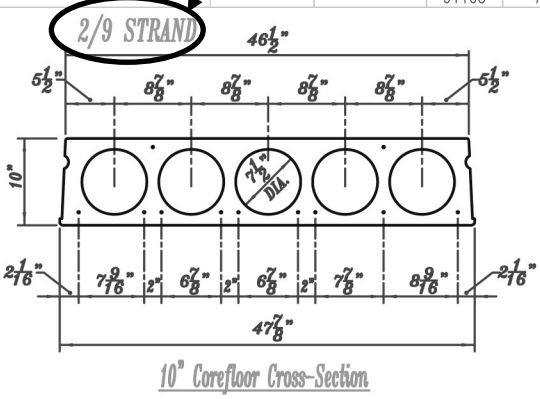
Locating Strands

MARK	NO.	LENGTH	WIDTH	C–O	W.P.	SUPERIMPOSED LOAD	I.D.	TOP SURFACE	WEIGHT	SLAB S.F.
CC–1	8	38'–2 1/4"	4'–0"			29.4 P.S.F. *	10SC26/108		10302	1222
CC–2	3	38'–2 1/4"	4'–0"			29.4 P.S.F. *	10SC26/98		10302	458
CC–3	1	32'–6"	4'–0"			29.4 P.S.F. *	10SC58		8768	130
CC–4	28	38'–2 1/4"	4'–0"			29.4 P.S.F. *	10SC68		10302	4277
CC–5	1	38'–2 1/4"	4'–0"	C–O,RB		29.4 P.S.F. *	10SC68		10245	152
CC–6	1	31'–8"	4'–0"			29.4 P.S.F. *	10SC58		8543	127
CC–7	3	24'–2 3/4"	4'–0"			29.4 P.S.F. *	10SC58		6534	291
CC–8	2	24'–6 1/2"	4'–0"			29.4 P.S.F. *	10SC58		6618	196
CC–9	4	18'–10 1/4"	4'–0"			29.4 P.S.F. *	10SC58		5087	302
CC–10	1	18'–10 1/4"	2'–0"	F.C.,RIP		29.4 P.S.F. *	10SC58		2970	38
CC–11	2	2'–4				29.4 P.S.F. *				
CC–12	5	11'–7	4'–0"	C–O,RB		150 P.S.F.				
CC–13	1	11'–7"	4'–0"	C–O,RB		150 P.S.F.				
CC–14	1	11'–7"	4'–0"	C–O,RB		150 P.S.F.	6ST56		2113	43
CC–15	1	11'–7"	4'–0"	C–O,RB		150 P.S.F.	6ST56		2113	43
CC–17	1	11'–7"	1'–5 1/2"	FC,RIP		150 P.S.F.	6ST56		955	17
CC–18	1	11'–7"	2'–6 1/2"	C–O,RB,RIP		150 P.S.F.	6ST56		1365	27
17	64	375'–3"	62'–0"						91103	7598

The "6" indicates six bottom strands.

The "2" indicates two top strands. The "9" indicates nine bottom strands.





Reviewing Shop Drawings:

Shop drawings will indicate the strand pattern for each individual hollow core plank. The shop drawings will also indicate the location of each hollow core opening in the plank. The core locations and strand locations can easily be field located on the underside of the panels or on the top side if a topping is not already in place. Contractors typically use a 4' piece of wood 2"x4", pvc, etc. to use as a template to mark the underside of the panels in order to field locate the strand and cores inside the panels.