

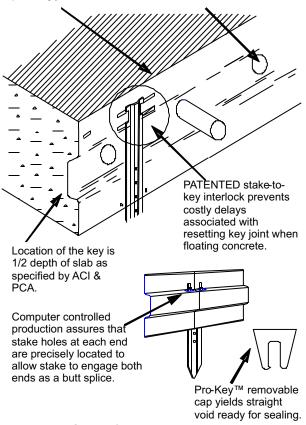
PRO-KEY™

(US Patent Number 5380122)

Metal Keyed Control Joint System For Concrete Slabs

ULTRA FINE Joint Line. Hemmed edge improves strength and produces architecturally pleasing joint lines.

Dowel knockouts never interfere with stake placement.



Product Specifications:

General:

- Construction Joints
- Control Joints

PRO-KEY™ is a stay in place metal keyed control joint former for use in concrete flatwork as a control or construction joint. When indicated on drawings or called for in specifications, the contractor shall furnish and install PRO KEY™ joint system as manufactured by BoMetals, inc., Carrollton, Georgia.

Material:

PRO-KEY™ is manufactured of 24 gauge, hot dipped, galvanized steel. It is furnished in 10' lengths for 4", 5", 6" and 8" and 10" -12" slabs. Each piece is punched on 6" centers with dowel rod knockouts and each piece is punched on 12" centers with slots for the interface of supporting stakes. The stake slots are 2" long for ease of stake attachment. Computer controlled production assures that dowel knockouts and stake slots never interfere with each other. LOCK SLOT™ stakes are manufactured from 16 gauge HRPO steel available in 12", 15", 18" and 24". The removable cap measures 3/8" x 3/8" and is manufactured of PVC compound.

SPECIFICATION SHEET

03/2011

Advantages:

- Positive stake-to-key lock of PRO-KEYTM prevents costly delays associated with resetting key joint when floating concrete. Stakes interlock with slots to prevent the key from rising off the stakes.
- Location of the key is 1/2 depth of slab as specified by ACI & PCA.
- LOCK SLOT ™ stakes double as a butt splice.
- Radius formed key eliminates the sharp angles that produce a spalling tendency.
- Tongue and groove design provide excellent load transfer characteristics for heavy wheeled traffic and prevents uneven settling associated with aggregate interlock.
- Eliminates costly form stripping and saw cutting. Replaces the slow and costly method of checker-board placement of concrete.
- ULTRA FINE profile at top edge eliminates surface voids, reduces spalling and produces architecturally pleasing joint

Installation:

- Space joints as indicated on drawings, as called for in specifications or as recommended by either ACI or PCA.
- With elevation checked by instrument, stretch a line the length of the joint below the finished elevation according to the chart below. If cap is used, drive stakes 3/16'deeper.
- Place the 10' sections of PROKEY™ along the line end to end. The stake slots are 12" on center and act as a simple template for stake placement.
- Install intermediate stakes on 2' centers ... 5 stakes per 10' section. The small stake slot found at each end will allow a stake to double as a butt splice. Additional stakes shall be used with the remaining slots for support if soil conditions require.
- Hang key joint on stakes and push downward. Stake hooks slip through lower slots and top locks into upper slots. PROKEY™ and stakes are punched with wire holes if needed.
- With continuous placement, concrete shall be placed to full depth simultaneously on both sides of joint. When PRO -KEY™ is used as a bulkhead or in a construction joint, knockouts shall be bent at 45 degrees into the concrete.

Dimensional Specifications:

A	B -20°	Slab Depth	A	В	С	String Elev.	Knock out
		4"	3 1/8"	2"	3/4"	-1/4"	7/8"
		5"	4 1/8"	2.5"	3/4"	-5/8"	7/8"
		6"	5 1/8"	3"	3/4"	-7/8"	7/8"
	c	8"	7 1/8"	4"	3/4"	-1 5/8"	1 1/4"
,		10" - 12"	9 1/8"	5"	3/4"	-2 3/8"	1 1/4"