STEP 1

Hold 4-1/2 inch (412 mm) high steel plate against existing slab, ensuring steel plate and bar are flush with existing slab surface. With spray paint, mark locations of pre-formed holes in steel plate for square dowels and anchor bolts. Remove Armor-Edge[®] n2e joint assembly.

STEP 2

Drill holes for provided 3/4 inch (20 mm) square dowels using 1-1/4 inch (31 mm) drill bit six inches (150 mm) deep \pm one inch (25 mm) and for provided anchor bolts using a 1/2 inch (12 mm) drill bit at least 4-1/2 inches (412 mm) deep. Firmly attached joint assembly to existing slab with provided anchors bolts. Check assembly for correct elevation and adjust if necessary.

STEP 3

Epoxy grout provided $3/4 \ge 12$ inch (20 ≥ 300 mm) square dowels into pre-drilled holes (the square dowels should be embedded six inches [150 mm] \pm one inch [25 mm]) so that they are horizontal at 90° to the slab face). Allow epoxy to cure. Install square dowel clips with the plastic covering the top of the dowel and the foam sides adjacent to the vertical faces of the bars. The plastic clip should extend the full length of the exposed dowel.

STEP 4

If the Armor-Edge[®] n2e joint assembly will butt up to a saw-cut contraction joint, cut through the full depth of the side of the joint assembly that abuts the saw-cut to allow activation of the joint.

STEP 5

Remove the steel alignment nut from nut and bolt alignment assembly - if not removed the joint will not activate. Cover the exposed steel alignment bolt with provided plastic thread protector and the exposed anchor bolt with duct tape to ensure they do not induce restraint.

STEP 6

Place and finish the new slab. Use internal vibration to consolidate concrete around the square dowels per industry guides for embedments.

STEP 7

Remove concrete paste from top of Armor-Edge® plate and bar during finishing.

STEP 8

If the existing slab is uneven or out of level, grind joint flush. If this is not possible, saw-cut 1/2 inch (12 mm) deep, 18 - 24 inches (450 - 600 mm) back into existing slab; chip existing slab down 1/2 - 3/4 inch (12 - 20 mm) and top with approved epoxy topping materials.

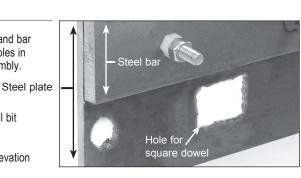
STEP 9

Fill joints as outlined in the project specification.





Foam sides adjacent to the vertical faces of the dowels



Square Dowel Clip[™] piece

covering top of dowel

