

JOINT SPALLING, MAJOR (Greater than 1")



REPAIR MATERIAL

Rigid Epoxy Mortar
Armor-Hard Kit
Armor-Hard Extreme

Semi-Rigid Epoxy or Polyurea Joint Filler

MM-80, Spal-Pro 2000

Freezer/Cooler

Spal-Pro 2000, AH Extreme

TOOLS & EQUIPMENT NEEDED

Preferred:

- Right angle grinder w/dustless shroud
- Joint clean-out saw
- Diamond blades
- Vacuum system
- Razor scraper / torch
- Pneumatic chipper

Minimal:

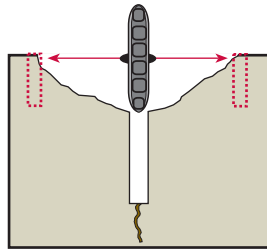
- Right angle grinder
- Diamond blades
- Shop vac
- Razor scraper / torch
- Cold hammer / chisel

DIFFICULTY



STEP 1

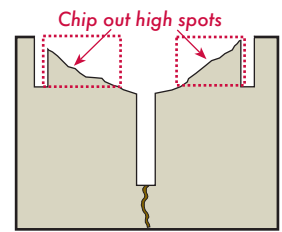
Create a vertical edge behind the spalled edges on both sides using a joint cleanout saw or right angle grinder with diamond blade. The depth of these cuts should be 1/2" minimum (3/4" preferable).



STEP 2

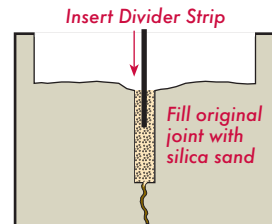
Chip out any concrete which remains above the elevation of the saw cuts using pneumatic chipper or cold hammer and chisel.

This new channel does not have to be completely flat but should be as close as possible.



STEP 3

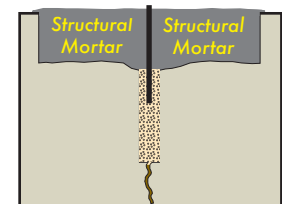
Vacuum new joint channel clean. Backfill original joint opening with silica sand up to the base of the newly formed channel.



Insert a divider strip into the sand and ensure it is plumb with slab edges. Top of strip should be slightly higher than floor elevation. If strip is to remain after repair, use a material that is rigid and narrow (i.e. PVC or fiberglass strip). If strip is to be later sawn out (see Step 6), use a material which is easy to saw out (i.e. durable cardboard or fiberboard, etc).

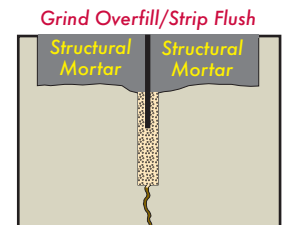
STEP 4

Fill both sides of strip with mortar from Armor-Hard Kit. Ensure that divider stays plumb during filling and do not fill over top of strip. Trowel mortar smooth and only slightly higher than edges of the slab panels.



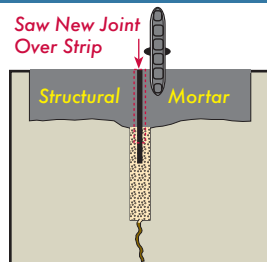
IF PERMANENT STRIP IS USED:

Allow mortar to cure and grind off overfill and protruding strip until repair surface and edges are flush with both slab panels.



STEP 5 - Only Necessary if Temporary Strip Used

Using joint cleaning saw and diamond blade, cut a new joint through structural repair to the depth of the strip. Remove any debris left from strip and vacuum joint clean.



STEP 6 - Only Necessary if Temporary Strip Used

Overfill newly formed joint with semi-rigid epoxy or polyurea joint filler and allow to cure. If overfill is excessive, razor off as much as possible. Grind excess structural mortar or joint filler flush across repair and along repair edges.

