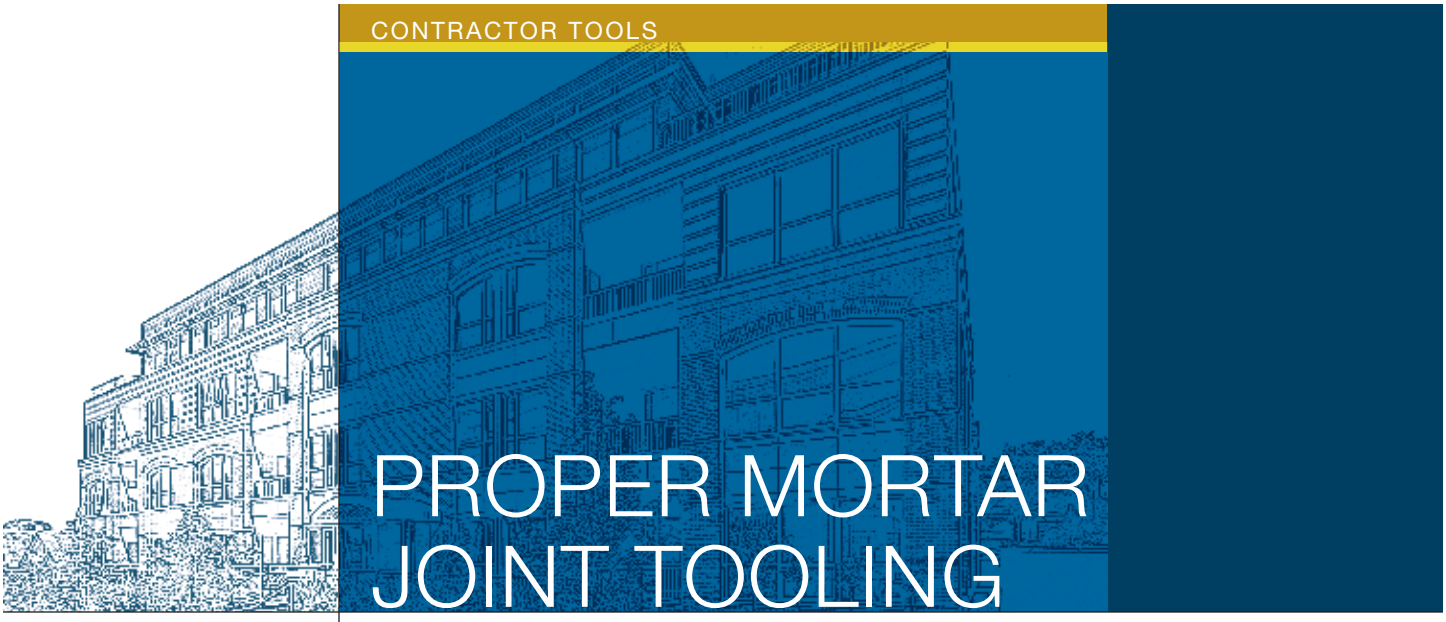
CONTRACTOR TOOLS



# PROPER MORTAR JOINT TOOLING

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## Tooling masonry mortar joints has both aesthetic and functional purposes. Most importantly, it is your first line of defense against water penetration.

Aesthetically, it produces the joint profile, which is made when the jointer or "tool" is struck against the surface of the mortar before the joint has set. This profile is usually concave but it can have other configurations including grapevine or "v" shape depending on the profile of the jointer or tool.

Functionally, proper tooling increases the water penetration resistance of the wall. The tool compresses the mortar against the unit helping seal any slight separation cracks that might form at that interface. The action of jointer on the unset mortar brings the cement fines in the mortar to the surface. This creates an exterior skin on the joint that is more resistant to water infiltration.

### Proper Mortar Joint Tooling Tip

**Tooling must be done at the correct time. Too early and the joint won't seal, too late and it tends to pull the mortar away from the unit, rather than compress it. Tooling should be done when the joint is "thumbprint" hard—when some of the moisture has been absorbed into the unit but there is enough to keep the joint plastic and the fines can be brought to the surface. For color consistency, tool all the joints at approximately the same level of moisture throughout a job—when they are all "thumbprint" hard.**

On a brick masonry building, the mason strikes the joint, brushes it, and then strikes it once more. For concrete masonry walls, the process is similar—the mortar is struck with the tool, and either brushed or rubbed with a piece of the block or Styrofoam; then is tooled once again. Notice that brick is never rubbed, only brushed, while concrete masonry can be either rubbed or brushed.

For aesthetic reasons, it is important that the sequence of striking is consistent throughout a project. Usually the head joints are struck first, then the bed joints. This tends to take care of the tag that can be left at the juncture of the head and bed joints.

### Proper Mortar Joint Tooling Tip

**Communicate the tooling sequence to all masons on a project before starting work, and incorporate the sequencing into the sample panel.**

team IMI
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