# The Perfect Bridge

## Rim Snaps™ Connect Vertically to Create Thin Brick Decor

The Margaret Street bridge provides a safe and quick connection between the north and south sides of North St. Paul, Minn. over Hwy. 36 while maintaining the aesthetics of surrounding neighborhoods.

Previously a road-level intersection crossed Hwy. 36, but with pedestrian traffic to nearby schools, this was deemed a safety hazard by local residents.

Margaret Street over Hwy. 36 in North St. Paul, Minn. Contractor - Lunda Construction

In order to create safe passage, the Minnesota Department of Transportation built the bridge while keeping local neighborhood beauty in mind.

To make the bridge appear more like a city street than a standard cement bridge, the Minnesota DOT used the Scott Rim Snap™ system, which combines thin brick in a reusable holder for poured-in-place applications. Thin brick was integrally cast into the poured-in-place concrete to create piers, railings and retaining walls.

*Top:* Stone-textured concrete and thin brick make an attractive combination for this service road tunnel.

*Left:* For a pleasing pedestrian break, this grassy rest area was incorporated into the bridge design. Rim Snaps™ allow for casting the thin brick into both sides of the bridge railing and all four sides of the columns at one time.



Scott System, Inc. 10777 E. 45th Ave. Denver, CO 80239 Ph: (303)373-2500 Fax: (303)373-2755 www.scottsystem.com

# The Rim Snap™ Goes Vertical

*Right*: Rim Snaps™ tab together and are stapled to vertical forms. Thin brick is pressed into pockets and held in place with the rubber gasket border's suction-like grip of the Rim Snap™. Vertical forms are set with rebar.

*Above:* Once the concrete hardens, the forms and Rim Snaps™ are removed, and the finished wall is power-washed with 180°F water to remove any leakage or residue.

*Below:* Workers close up the form. Concrete is poured between the forms and vibrated.

## The Strength of Concrete

Generally you don't see a lot of brick used on heavy highway bridges and overpasses because of high vibration.

With the Rim Snap™, the bond between the thin brick and concrete is permanent.

The great advantage of thin brick in concrete is evident from this picture of a core taken from a brick-faced panel. Note how the concrete actually forms the mortar joint between the thin bricks. According to independent testing, the brick-to-concrete bond is in excess of 150 psi, and even at that, the concrete fails and not the bond between the thin brick and concrete, making it optimal for seismic zones and highway bridges.

The Rim Snap™ is meant for cast-in-place, vertical applications, including retaining walls, columns, bridge railings and highway overpasses.

Please contact Scott System for more information.

*Above:* Columns and bridge piers are finished with integrally-cast thin brick.



Scott System, Inc. 10777 E. 45th Ave. Denver, CO 80239 Ph: (303)373-2500 Fax: (303)373-2755 www.scottsystem.com