# Heckmann Building Products Inc.

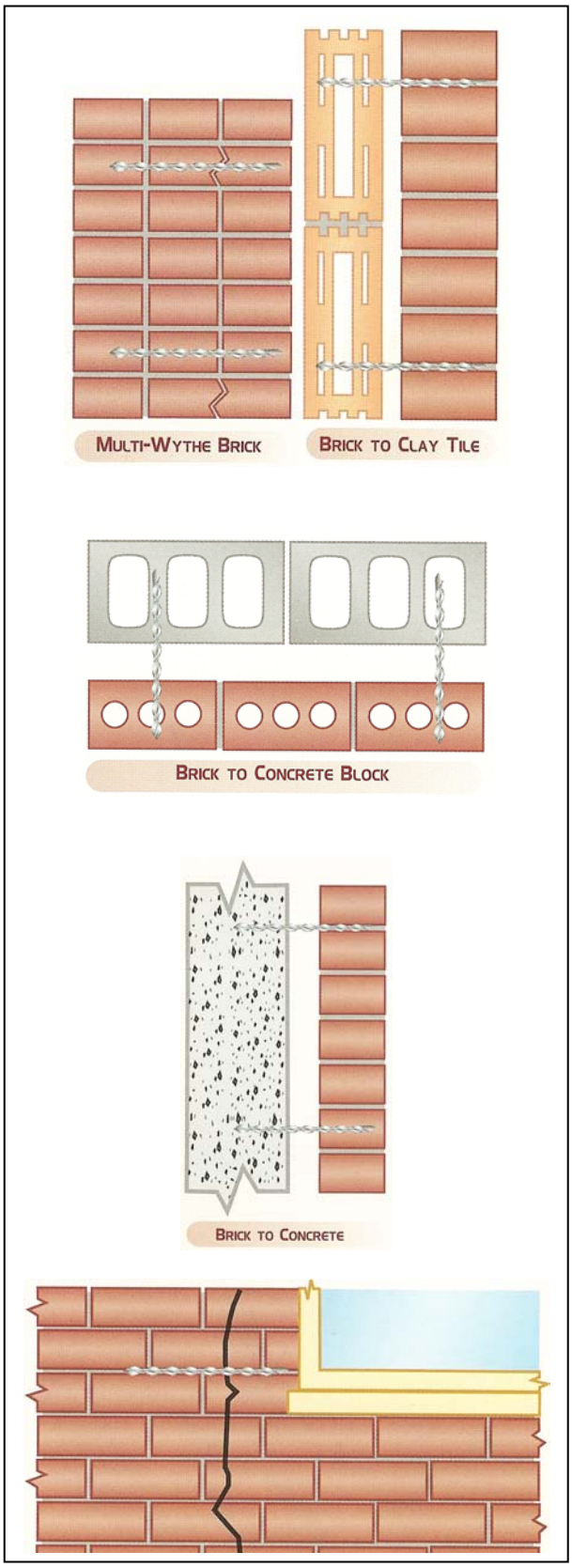
1501 N. 31st Avenue
Melrose Park, IL 60160-2911
800-621-4140 or 708-865-2403 Fax: 708-865-2640
**www.heckmannanchors.com**


## SUBMITTAL SHEET: #391 Remedial Tie

The No. 391 Remedial Wall Tie provides a quick, effective and economical solution for securing and stabilizing masonry. Existing facades constructed of brick, stone, masonry, precast concrete, etc. that have wall ties missing or corroded, can be re-attached using the No. 391 Remedial Tie without removing the veneer. This stainless steel helical tie is dry set. The Remedial Tie cuts a threaded groove into the masonry as it is driven into position through a pre-drilled pilot hole. The end result is a strong and permanent connection between wythes without the use of toxic adhesives or rigid mechanical connectors.

The Remedial Wall Ties are manufactured from Type 304 stainless steel and thus provide excellent corrosion resistance.

Available in 8 mm and 10mm width, Remedial Ties are able to withstand anticipated loadings with enough flexibility to allow for normal wall movement. Various tie lengths are available to suit wall conditions.




**Standard Sizes:**

| Standard No. | Size |
|---|---|
| 391-86 | 8 mm x 6” |
| 391-88 | 8 mm x 8” |
| 391-810 | 8 mm x 10” |
| 391-812 | 8 mm x 12” |
| 391-106 | 10 mm x 6” |
| 391-108 | 10 mm x 8” |
| 391-1010 | 10 mm x 10” |
| 391-1012 | 10 mm x 12” |
| 391-8T | Setting tool 8 mm |
| 391-10T | Setting tool 10 mm |

**Stainless Steel:** ASTM A 167 AISI Type 304.

# SUBMITTAL SHEET: #391 Remedial Tie (page 2)

## Physical Characteristics

| Outside Tie Diameter | 8 mm | 10 mm |
|---|---|---|
| Pitch length in. (mm) | 0.79 (20) | 1.0 (25.4) |
| Tie cross-sectional area $In^2$ ($mm^2$) | 0.016 (10) | 0.02 (13) |
| Yield strength ksi (MPa) | 108 (745) | 93 (640) |
| Tensile Strength ksi (MPa) | 128 (883) | 119 (820) |

## Ultimate shaft Buckling Strength

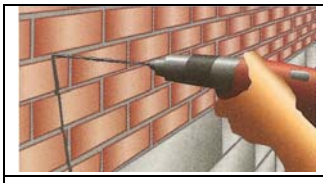
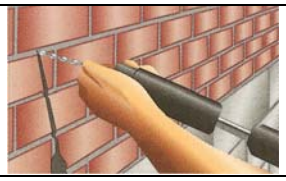
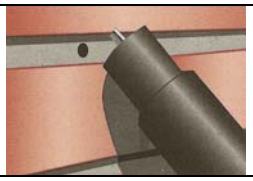
| Unsupported Length (mm) | Capacity (lbs) 8 mm | 10 mm |
|---|---|---|
| 1 inch (25 mm) | 1,620 | 2,335 |
| 2 inch (50 mm) | 1,425 | 1,613 |
| 4 inch (100 mm) | 1,100 | 1,185 |
| 6 inch (150 mm) | 725 | 614 |

## Performance Characteristics

| Material | Effective minimum embed (inches) | Ultimate tension/compression (lbs.) 8 mm | 10 mm |
|---|---|---|---|
| Mortar Joint | 3” | 700 | 600 |
| Brick (solid) | 3 5/8” | 700 | 700 |
| Brick (cavity) | 3 5/8” | 1,200 | 1,400 |
| CMU hollow 6” | 1” | 800 | 900 |
| CMU grouted Lightweight | 2” | 550 | 550 |
| Concrete | 1 ¼” | 1,200 | 1,300 |
| Wood Stud | | | |
| 2 x 4 | 3” | 520 | n/r |
| 2 x 6 | 3” | 520 | n/r |
| Metal Stud | 16 gage | 300 | n/r |
| Granite | 1 1/8” | 500 | 650 |
| Travertine | 7/8” | 500 | 800 |
| Limestone | 3” | 600 | 620 |

This data reflects the results of lab, field, and in-house results and is provided as a guideline for the designer. Site testing is encouraged for verification of load carrying capacity. (n/r = not recommended)

## Installation

| | | | |
|---|---|---|---|
|  |  |  |  |
| Step 1: Drill a pilot hole using percussion hammer drill (3-jaw chuck type) through the mortar joint. | Step 2: Insert the Remedial Tie into the dry set installation tool mounted on the rotary hammer S.D.S. drill. | Step 3: Drive the Remedial Tie until the nose of the dry set installation tool is hard against the veneer. | Step 4: The dry set installation tool automatically recesses the Remedial Tie into the face of the masonry. Patch hole. |

Approvals:

Comments: