

Submittal Sheet
#391 Helix Remedial Tie

The No. 391 Helix 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 Helix Remedial Tie without removing the veneer. This stainless steel helical tie is dry set. The Helix 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, Helix 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:

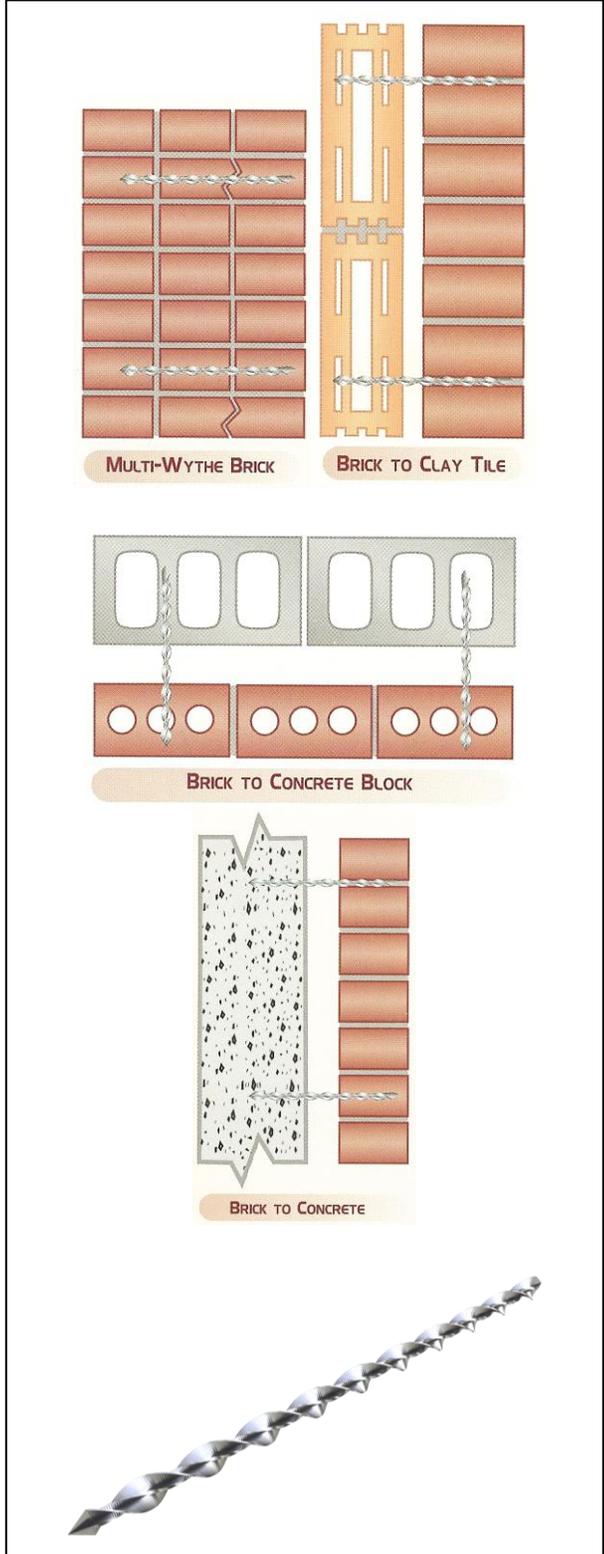
LENGTH	8 MM	10 MM
6"	391-8-6	391-10-6
7"	391-8-7	391-10-7
8"	391-8-8	391-10-8
10"	391-8-10	391-10-10
12"	391-8-12	391-10-12
14"	391-8-14	391-10-14

391-Tool Hammer Setting tool 8 mm

391-ToolE Economy Setting tool 8 mm

Quantity: _____

Stainless Steel: ASTM A 176 AISI Type 304



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Physical Characteristics

Outside Tie Diameter	8 mm
Pitch length in. (mm)	0.79 (20)
Tie cross-sectional area In ² (mm ²)	0.016 (10)
Yield strength ksi (MPa)	108 (745)
Tensile Strength ksi (MPa)	128 (883)

Ultimate shaft Buckling Strength

Capacity (lbs)

Unsupported Length (mm)	8 mm
1 inch (25 mm)	1,620
2 inch (50 mm)	1,425
4 inch (100 mm)	1,100
6 inch (150 mm)	725

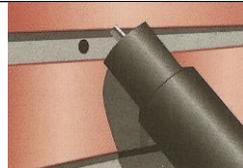
Performance Characteristics

Ultimate tension and compression

Material	Effective minimum embed (inches)	8 mm
Mortar Joint	3"	700
Brick (solid)	3 5/8"	700
Brick (cavity)	3 5/8"	1,200
CMU hollow 6"	1"	800
CMU grouted Lightweight	2"	550
Concrete	1 1/4"	1,200
Wood Stud		
2 x 4	3"	520
2 x 6	3"	520
Metal Stud	16 gage	300
Granite	1 1/8"	500
Travertine	7/8"	500
Limestone	3"	600

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.

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.