



Ramset[®] I-F

Insulation Fastening System

NEW!
T4 I-F
GAS TOOL



**THE
FASTER
AND SAFER,
INDUSTRY-APPROVED
THERMAL BREAK
FASTENER**



Above acoustical ceilings



Foundations & basements



Interior walls on concrete block



Behind cladding over wood stud walls



Behind cladding over concrete block walls



Behind cladding over steel stud walls

Ramset I-F Insulation Fastening System



Installs in seconds

- Up to 4x faster than stick pins
- One-step installation
- Eliminates all fastener-related pre/post work



Reduces injuries

- Fewer hand injuries from sharp stick pins
- Less recoil than powder tools
- Reduced torque than screw installations



Meets rigorous industry standards

- First to market and third-party-tested/approved
- Recommended by multiple insulation manufacturers



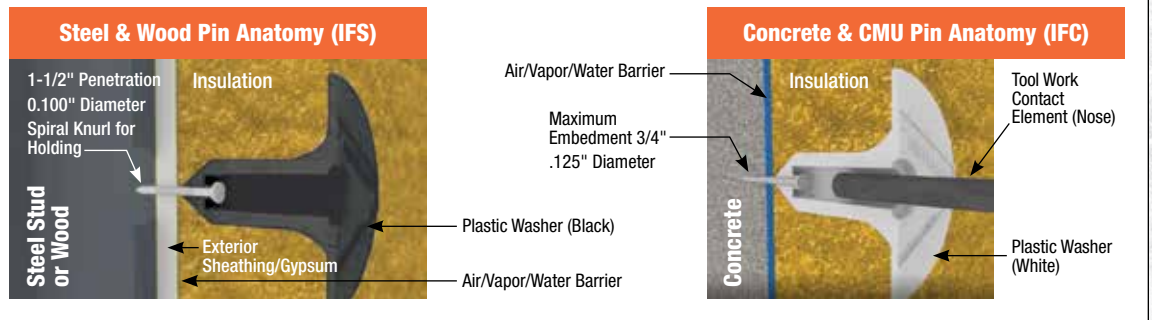
Reduces thermal bridging

- Integrated cap creates thermal break
- Saves energy – reduces building heating and cooling costs
- Up to 27x more efficient than other methods



Performs in multiple environments

- Works with insulation up to 6 inches thick
- Attaches directly to concrete, block, steel stud, and wood
- Works in all weather conditions



Ramset-I-F will fasten into:



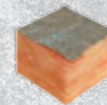
Mineral Wool



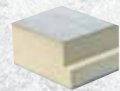
Extruded Polystyrene (XPS)



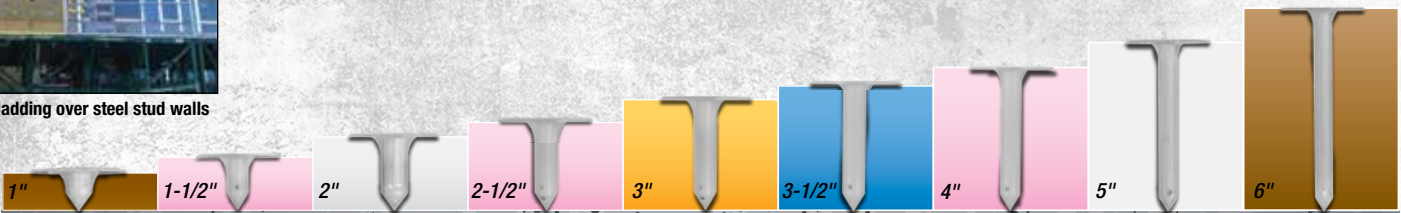
Expanded Polystyrene (EPS)



Fiberglass



Polyisocyanurate (Poly ISO)



CONCRETE OR BLOCK



Depth adjuster

Get optimal pin performance by adjusting the setting based on type of base material.



Auto Shut Off/On
Won't drain the Li-Ion battery when not in use

Fuel cell included in every box of fasteners
Never have to stall a job

Fuel and battery gauges
No interruptions in your day because you always know where your tool stands

**Improved Stick Rate
Better Reliability**
Operating Temperature: 5°F to 122°F
Light-weight: Only 7.6 lbs
Battery Capacity: 3,500 shots

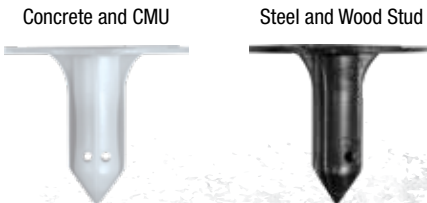


Integrated Cap

Closed cap creates thermal break
99.5% thermally efficient when cap is closed

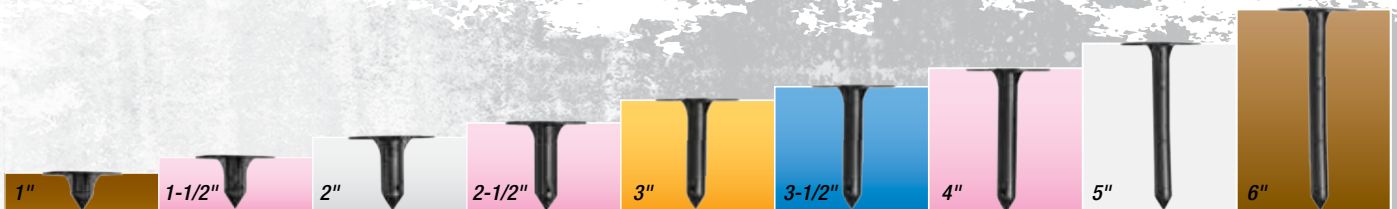
Washer Diam. 2-3/8"

Large bearing surface keeps insulation from sagging



FASTENER SELECTION CHART

| INSULATION THICKNESS | CONCRETE OR BLOCK PART NO. | STEEL OR WOOD PART NO. | BOX QTY |
|----------------------|----------------------------|------------------------|---------|
| 1" | T4IFC-100 | T4IFS-100 | 500 |
| 1-1/2" | T4IFC-112 | T4IFS-112 | 500 |
| 2" | T4IFC-200 | T4IFS-200 | 500 |
| 2-1/2" | T4IFC-212 | T4IFS-212 | 500 |
| 3" | T4IFC-300 | T4IFS-300 | 500 |
| 3-1/2" | T4IFC-312 | T4IFS-312 | 500 |
| 4" | T4IFC-400 | T4IFS-400 | 500 |
| 5" | T4IFC-500 | T4IFS-500 | 500 |
| 6" | T4IFC-600 | T4IFS-600 | 400 |
| Tool | T4IF | T4IF | 1 |



STEEL OR WOOD



Performance Data

| | | Insulation Thickness | | | | | |
|------------|----------------------------------|----------------------|---------|---------|---------|---------|---------|
| | | 1 in | 2 in | 3 in | 4 in | 5 in | 6 in |
| Reference | U – Factor (W/m ² °C) | 1.1786 | 0.7122 | 0.5103 | 0.3976 | 0.3257 | 0.2758 |
| | Efficiency (%) | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% |
| Stick Pin | U – Factor (W/m ² °C) | 1.2422 | 0.7706 | 0.5597 | 0.4397 | 0.3621 | 0.3078 |
| | Efficiency (%) | 94.88% | 92.42% | 91.17% | 90.43% | 89.94% | 89.59% |
| Ramset I-F | U – Factor (W/m ² °C) | 1.1845 | 0.7162 | 0.5132 | 0.3999 | 0.3276 | 0.2773 |
| | Efficiency (%) | 99.50% | 99.45% | 99.44% | 99.43% | 99.42% | 99.42% |



For tool repair, please visit
www.ramsetrepair.com
 or call 800-222-6990.

CONCRETE

| PART NUMBER SERIES | CONCRETE STRENGTH (PSI) | ALLOWABLE/ULTIMATE TENSION LOADS (Lbs) |
|--------------------|-------------------------|--|
| IFC | 3600 - 6500 | 35 - 211 |

HOLLOW CONCRETE BLOCK

| PART NUMBER SERIES | ALLOWABLE/ULTIMATE TENSION LOADS (Lbs) |
|--------------------|--|
| IFC | 35 - 184 |

STEEL STUDS

| PART NUMBER SERIES | SHANK DIAMETER (INCH) | INSTALLED IN COLD FORMED STEEL FRAMING (lbf) | | | | | |
|--------------------|-----------------------|--|----------|----------|----------|----------|----------|
| | | 22 Gage | 20 Gage | 18 Gage | 16 Gage | 14 Gage | 12 Gage |
| IFS (Knurled) | 0.100 | 20 - 120 | 33 - 200 | 46 - 280 | 60 - 360 | 62 - 371 | 75 - 448 |

WOOD

| PART NUMBER SERIES | SHANK DIAMETER (INCH) | INSTALLED IN 15/32" (1/2" NOMINAL) 4 PLY PLYWOOD SHEATHING (lbf) |
|--------------------|-----------------------|--|
| IFS (Knurled) | 0.100 | 16 - 93 |

Add this specification to the project...

Specification: CSI Division 07-Thermal and moisture protection insulation shall be mechanically fastened to the building substrate or component with Ramset I-F Thermal-Break insulation fasteners from Illinois Tool Works.

Evaluations:

ICC-ESR-1955
 ASTM E331 (Water Penetration)
 ASTM E2178 (Air Leakage)
 ASTM E84 (Surface Burning Characteristics)

Fastener Specifications:

- Pin Material: Heat treated carbon steel
- Pin Finish: Mechanical Zinc Plated
- Washer Material: High Density Polyethylene (HDPE)
- Pin Diameter: ~0.125" for concrete, 0.100" for steel
- 2-3/8" Holding Diameter
- Each fastener has clear branding along with length of fastener assembly