

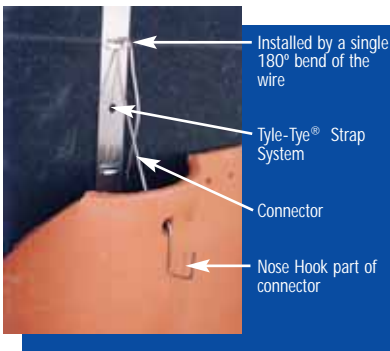
## TYLE-TYE® SYSTEMS

Tyle-Tye® Systems include the Tyle-Tye® Strap System, the Twisted Wire Tyle-Tye® System and the Riness® Tile-Tie System. With these fastening methods the only puncture of the membrane is at the anchoring points. These anchoring points are sealed in the appropriate roofing mastic.

Tyle-Tye® Systems are IBC and IRC approved.  
Patent #: 5,921,045 and 6,125,592

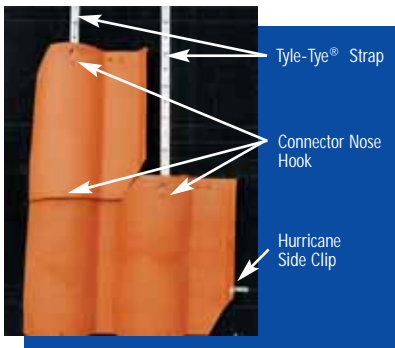
**ES**  
ESR—1411

## Patented TYLE-TYE® STRAP SYSTEM

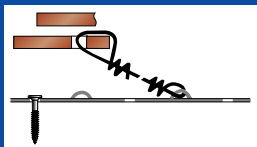


The patented Tyle-Tye® Strap system is used where maximum holding power is required and for the most stringent of building code regulations. Each strap is 10 feet long. Once the straps are fastened to the deck, and the fastening points are sealed in approved roofing mastic, each tile is quickly connected to a punch out providing for a speedy installation.

The Tyle-Tye® Strap roof tile fastening system consists of a 1" wide by 24 gauge strap with punch outs every 4" to connect each piece of roofing tile, and anchor holes every 4" to nail, screw or spike the strap securely to any type of roof deck. Individual tiles are secured to the strap using Connectors, Tie Wires or Tie Rods. Besides being anchored at the ridge, hip and eave, the Tyle-Tye® Straps are anchored at 5 foot intervals as required to avoid overstressing any one anchor point. In no case shall the anchor spacing be longer than 10 feet.

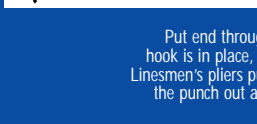


### Connection of Tiles into Tyle-Tye® Strap/Twisted Wire



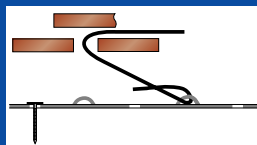
#### Tie Wires

Wrap each tie wire through the tile, diamond or punch out then twist back on itself a minimum of 3 full revolutions.



#### Connectors

Put end through the tile until the nose hook is in place, then with a good pair of Linesmen's pliers push the straight end into the punch out and bend it back on itself one full revolution.



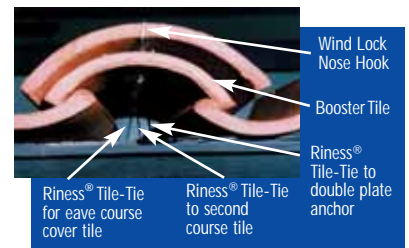
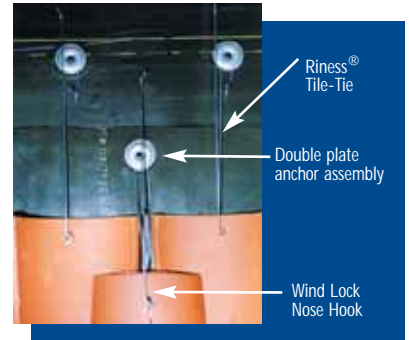
#### Tie Rod

Put tie rod through the tile and bend it back parallel to the plane of the tile, then put the other end through a punch out, or diamond and bend it back on itself one full revolution.

## RINESS® TILE-TIE SYSTEM

Use of the Riness® Tile-Tie System as directed, results in a minimally penetrated membrane while the Riness® Ties interlock the tiles together to resist wind damage, earthquake damage, or shifting of tile from other causes.

The Riness® Tile-Tie system consists of a series of interconnecting pre-formed wire ties through the holes of the tile to provide a continuous anchorage against sliding off. Besides being anchored at the ridge and eave line, the wire ties are anchored at 5 foot intervals as required to avoid overstressing the individual fasteners, but in no case longer than 10 feet. For added protection and in designated high-wind areas, and seismic zones 3 and 4, use the appropriate size Wind Lock Nose Hook for all cover tiles or at least the first three courses at the eave.

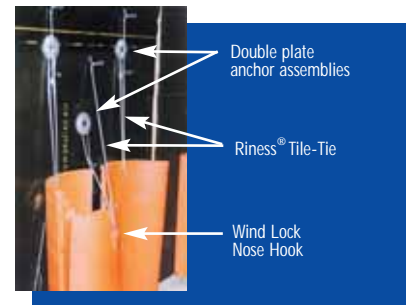


For further information refer to the Riness® Tile-Tie Specifications.

### Roofing Tip

Use like metals for the entire system to prevent electrolysis. Use stainless steel tie wires and stainless steel, stainless anchors for stainless steel Tyle-Tye®. Use copper tie wires and brass anchors for copper Tyle-Tye®. Use brass tie wires and brass anchors for brass Tyle-Tye®. Use galvanized steel tie wires and galvanized steel anchors for galvanized steel Tyle-Tye®. For installation to steel decks use galvanized steel or stainless steel fastening systems.

For installation to concrete decks, use stainless steel fastening systems and stainless steel compression spikes. When using copper or brass fastening systems, use copper, brass or stainless steel fasteners. When attaching to steel decks, use stainless steel or carbon steel self-drilling screws. For light density concrete decks and over insulated decks, please consult the factory.



### Roofing Tip

California State Architectural Code Title 24 provides building specifications for all state buildings to protect the safety of the public. Tyle-Tye® systems have been part of the California State Building Code Title 24 since 1933.

To date there have been no known reported failures of this system.

**Newport Tool & Fastener Company, Inc., 2000 5th St., Norco, CA 92860**

**(800)645-7811**

**(951)739-6800**

**Fax (951)808-0034**

**www.newportfastener.com**