



ZIM GROUP LTD.

R O O F S F O R E V E R

INSTALLATION MANUAL

METAL ROOFING TILES

INSTALLATION SEQUENCE

- **Prepare roof and install underlayment**
- **Install strapping**
- **Install starter strip and hermetic**
- **Install gable end**
- **Install valley and open valley**
- **Install metal tiles**
- **Install chimney flashing**
- **Install vent pipe flashing**
- **Install ridge capping**
- **Joining the roof to a wall**

Roof Preparation

Remove all foreign objects, tighten all screws and pound in all nails as needed. Sweep the roof clean.

Underlayment

When preparing the roof base, it is recommended that barrier layers (moisture and vapor barrier) be installed as underlayment. The vapor-permeable protective underlayment protects the attic space from dust, soot, rain and snow, and protects the thermal insulation. It is installed starting from the ledge going up to the ridge with a 4" overlap. The water barrier is extended upward to 1½" on vent pipes and 4 - 6" on chimneys, and its top edge must be sealed against the vertical surface.

Strapping and Ventilation

Warm air rises from the interior of the building and the moisture condenses on cold surfaces. To prevent this, it is necessary to insulate the attic spaces, install proper moisture barriers under the strapping, and provide sufficient ventilation.

To assure proper ventilation, air circulation must be permitted along the entire roof perimeter. Our strapping assures free air movement from the roof ledge to its ridge, thereby cooling the warm air inside to complement the outside temperatures without any condensation.

The strapping is constructed of 2" x 2" or 2" x 3" planks. 1" x 3" cross-brace rails are installed first, at right angles to the roof ledge, starting at 3½" from the ledge all the way to the ridge. The distance between the rails equals the distance between the principal trusses, i.e. the rails are installed over the principal trusses every 16 - 24".

The first plank is then nailed 3½" away from the eave, parallel to the ledge. The spacing between the first and second plank is 12" measuring from the center of the plank. The other planks are nailed with 13" between centers or between the top edges. The strapping is constructed of 2" x 2" or 2" x 3" planks. The first plank should be ¼ - ½" thicker than the rest and must be installed very precisely because it will be used as the guide during installation.