

Advantages:

1. Elegant appearance and light weight; yet maintaining the traditional clay tile roofing profile.

Rumah Terbalik, Tamparuli

- 2. Using latest high-tech machinery in the manufacturing process of metal tile profile
- 3. Profile excellence No damage or crack on the step folded edge.
- 4. Distinct weather proof feature with anti-leak capillary drainage on female rib.
- 5. Linear security line on male rib to ensure the proper lapping.

Male rib Linear security line

Introduction

The **Rofo** tile profile (product code RT 762) is a long run metal step roofing with various significant technical improvements that other manufacturer of the same product range envies.

The **Rofo**tile profile not only being highly accepted by various professional architects and consultants but also the attained the latest improvements and technologies in the metal cold forming process with flawless defects during manufacturing.

The high precision machine ensures accurate module length and squareness of **Rofo**tile with great consistency on every piece produced.

- Maintaining the traditional beauty of clay roofing and yet reducing the weight significantly.
- Significant technical improvements on profile design overcome the leakage problem and durability.

Profile Improvement

In the designing of **Rofo**tile, we consider the establishment of a good quality profile as the key factor to meet our customers' expectation. The following are some of the features we have incorporated:

- 1. The beauty and appearance
- 2. No material forming defects or fatigues that will create leak problem or perforation.
- Easy install
- 4. Accurate and neat on lap-joints.

The Refetile profile has been thoroughly tested during our stringent R&D test procedures and meets all the requirements.



Technologies improvement

In the design and production of Rofotile; we applied the latest technology in the cold roll forming machine and adopting the highly recognized standards in accordance to AS 1595 and AS 1365 standard to produce. The production of every module is highly precise and accurate; thanks to the computerized control system and precision server motor. The step forming rollers and blades are of SK II material with precision moldings to ensure fine and smooth edges.

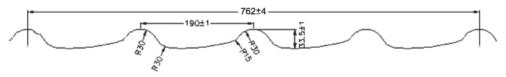
Profile Identification

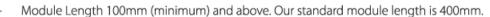
At the head of every pieces of Rofotile, we have imprinted Rofotile wording for identification purpose. This to avoid the owner keep searching the profile once they want to do renovation or any additional roof from the existing building.



- Normally the weak point for metal step roofing. To overcome this problem, we address all grids and bending radius to falls within the standard shear tolerances permitted per material mill specifications.
 - The grid and radius of mould improved and eradicate the shear effect when forming the step. (Picture 1)
 - No reduction in metal thickness and hence no weaken of metal and color coating system. (Picture 2)

Profile Specification



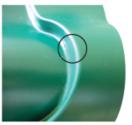




- Rib high 34mm
- High Ix
- Standard overhang 30mm



Module length but adjustable



Picture 1



Picture 2

Material Specification

Generally the raw material consist two parts Steel substrate and color coating part.

- Strict material control in selection of raw material and color coating- elongation no damage during forming step.
- Using semi hard or soft material to ensure no damage during forming of the step.

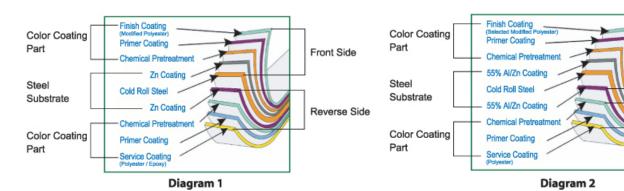
Steel Substrate

Base metal Steel: JIS G 3302: 1998 or ASTM A 792M

Tensile Strength: 300 to 400 Mpa

Base Metal Thickness: 0.30mm/ 0.35mm/0.38mm/0.40mm/0.42mm

Base Steel Coating: Zinc Coated (Z 18) or Aluminum Zinc 55% Coated (AZ 150, AZ 100) with minimum spangle finish.



Color Coating part

The pre-galvanized paint coating system material used in the Rofotile meets ASTM Standards. The high quality exterior finish has excellent gloss retention (ASTM D523), color retention (ASTM A 755(M), Hardness (ASTM D 3633) Cross- Hatch Adhesion (ASTM D 3359) Bend Adhesion(ASTM D4145), Reverse Impact(ASTM D2794), Humidity Resistance(ASTM D2247), Salt Spray Resistance(ASTMB 117), Weather meter Test(ASTM D 822), Chalking Resistance(ASTM D 4214) Exterior Weathering(ASTM D4141) and Abrasion Resistance(ASTM D 968).

Total Coating Thickness: 0.36mm/0.41mm/0.44mm/0.46mm/0.48mm±0.02mm



Front Side

Reverse Side

Roofing Pitch

Rofotile is suitable for roof with pitch of 13° or more.

-Roof pitch lesser than 13° will collect dust or may leaking.



Installation Guideline

- Screw and Accessories
- Nailing locations.

Overlapping

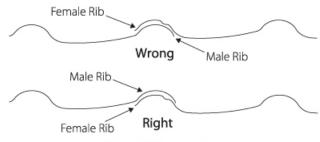
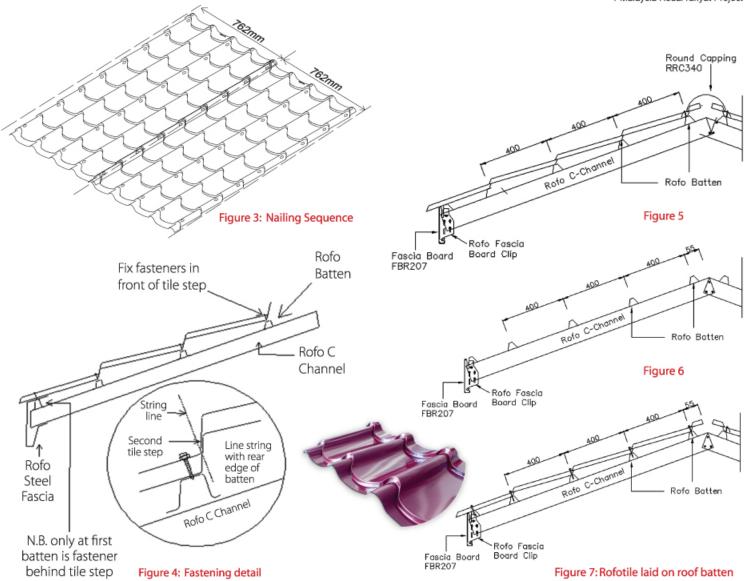


Figure 2: Cross Section



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General Step Roofing Leaking Problem

- No anti-leak capillary drainage at female rib.
- Male Rib no joint alignment.
- Material crack at step folding edge during forming.
- 4. Batten over-spacing or not in-line causes the lap-joint to open.
- Wood batten out of shape.
- 6. Wrong lapping during installation.

Length

Supply in any length but recommend length is 7.5m.

Other important note

Material Site Storage before installation

To ensure the life-span of **Refe**tile, the material must be kept in dry, covered and stored above the ground conditions. This is to avoid any trapped water between the stack roofing sheets. Failure to maintain proper storage will cause damage to the material coating surfaces and color texture.



Handling

- Hold the roofing in the correct position to prevent the step damage and out of shape.
- Do not drag the sheet as this will cause scratches on the coating.

Walk over batten

- Always walk over batten
- Use soft anti-skid rubber shoes when walking on the pre-coated roofing sheet.

Cutting and cleaning

- When cutting metal sheets with a grinding disc or nibbler, the metal debris must be thoroughly swept as the debris will eventually rust and spread serious damage to the pre-coated roof surfaces. It is highly recommended to use a snipe cutter (scissor) whenever possible instead of cutting disc or nibbler that will produce metal debris. When using the cutting disc method, the roofing sheet must be swept and clean with a soft cloth thereafter. This is to ensure that no metal particles remain on the roof surfaces. When cutting the roofing sheet, it is recommended to cut on the ground whenever possible. To maintain the life-span of Rofotile, the surface must be totally free from any metal element like metal particle, rivet, metal nail, metal screw and others. Otherwise the corrosion of such particles or material will affect the roof coating surfaces performance.



For more information, please contact us



Kina Roof Industries (Sabah) Sdn. Bhd. (667221-X) Roofor You Marketing Sdn. Bhd. (1030310-X)

Lot 9, Jalan 2A, KKIP Timur, IZ8A, 88460 KKIP, Kota Kinabalu, Sabah. **Postal Add:** P.O.Box 96, Pejabat Pos Mini, 88450 Telipok, Sabah, Malaysia. T: 088 498 333, 494 333, 016 8622323 F: 088 499 933 / 014 699 4076 Colo Steel System Sdn. Bhd. (673950-D)
Lot 3610, Jln Maigold, Taman Desa Senadin, Shophouse, 98100 Mirl, Sarawak, Malaysia.
T: 085 491 288 F: 085 661 387

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