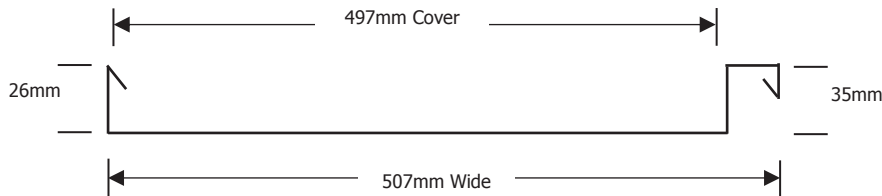


MARSHALL TRAY



PIONEER BRAND MARSHALL TRAY is available custom cut to any length up to and including 10 metres by arrangement with the manufacturer and subject to the availability of suitable transport. Custom width flat tray pans in the centre are also available.

FIXING

PIONEER BRAND MARSHALL TRAY can be fixed by a roofing specialist, builder or plumber. They provide an added benefit of a concealed clip fastening system which provides a clean finish to any roof. Marshall Tray must be fixed over a plywood substrate base with a minimum thickness of 12mm. Each continuous concealed clip must be fastened with a 10-gauge x 50mm stainless steel countersunk head screw. Each screw must have an embedment of 30mm fixing the concealed clip into timber.

RECOMMEND PITCH

Table: Roof Length v Slope

Roof Length	Minimum Slope
Up to 10m	4°

DIMENSIONS

Marshall Tray has been designed, tested and analysed in accordance with NZ Metal Roofing manufacturers code of practice. All dimensions supplied are nominal.

OIL CANNING

Oil canning is the visible waviness within the flat tray pans of metal roofing and cladding. Oil canning can present itself as an aesthetic effect in standing seam tray profiles and profiles/flashings with wide flat tray pan elements. It does not impair the performance of the product. The oil canning effect can occur during the forming and installation processes, as well as during thermal expansion of the roofing and cladding sheets life time. The effect can be more or less visible depending on different colours and gloss levels of the material and different angles of sun and light. There are options available to reduce the oil canning effect in flat tray pan type profiles and flashings. For example, a) increase the thickness of the material, b) use stiffening swages, c) reduce the width of flat tray pans.

SOUND REVERBERATION

A wide pan version of tray roofing and wall cladding has been known to be susceptible to wind driven noise on occasions. Please refer to the manufacturer for additional information.

DESIGN

Marshall Tray is a folded product designed to minimise oil canning in the flat tray pan section.

Table: Number of Sheets v Coverage

Number of Sheets	Coverage (metres)
1	.497
2	.994
3	1.491
4	1.988
5	2.485
6	2.982
7	3.479
8	3.976
9	4.473
10	4.970



TECHNICAL INFORMATION

FEATURES

STANDARDS

NZS3403:
Hot-dip Galvanised Steel Sheet for Building Purposes.
AS/NZS1397:
Steel Sheet and Strip Hot-dipped Zinc Coated or Aluminium/Zinc Coated.
AS/NZS2728:
Prefinished/Painted sheet metal producers performance requirements.
AS1562.1:
Design and installation of sheet roof and wall cladding metal.
AS4040:
Methods of testing sheet roof and wall cladding.

HANDLING CHARACTERISTICS

Inspect deliveries on arrival. If moisture is present, individual sheets should be dried with a clean cloth and then stacked to allow air to circulate. Sheets should be stored off the ground under ventilated cover.
Cross-stack or fillet sheets where outside storage is unavoidable. Sheets should be lifted into position on the roof wherever possible and not dragged or slide over rough surfaces or other sheets. Flat soled rubber footwear must be worn when walking on the roof. Roof and gutters must be swept clear of all construction debris on completion of fixing.

OTHER PRODUCTS

Marshall Industries also offer a range of accessories and fasteners as well as downpipes, roof lighting, weatherboards and other cladding profiles.

FURTHER INFORMATION

For additional advice and technical information contact your local branch.

SUPPLY SERVICE

PIONEER BRAND MARSHALL TRAY is available from the manufacturer.

CONSTRUCTION CHARACTERISTICS

FASTENERS

Fasteners must comply with AS3566 Class 5 or stainless steel and have a durability compatible with the roof materials otherwise staining or early failure may occur. The use of Cadmium or Zinc plated screws without additional protection is not recommended.

MATERIAL SPECIFICATION:

Material	BMT (mm)	Yield Stress
Aluzinc	.55	G300
Prefinished	.55	G300

MARSHALL TRAY MATERIAL

MANUFACTURE

ALUMINIUM/ZINC COATED

Manufactured from Hot-dipped Zinc (45%) and Aluminium (55%) alloy coated steel. Standard AS1397.

PREFINISHED

Prefinished materials are manufactured under strictly controlled conditions to provide optimal corrosion protection and very good resistance to fading. Prefinished coatings are highly decorative and generally exceed the life of traditional post-painted systems. There are several type of paint systems specifically designed for the variety of moderate, severe, very sever and special conditions found throughout New Zealand. Selection of the suitable system is important, as are installation and maintenance procedures. Reference should be made to the environmental categories guide and technical brochures, or contact your local Marshall Industries branch for sales and technical assistance.

DISCLAIMER

The information provided in this publication to the best of our knowledge is correct at the time of publication. The information is not a guarantee of performance or suitability for a particular application. We are happy to provide advice on specific applications. Marshall Industries Ltd reserve the right to alter and revise published information without notice.

MARSHALL INDUSTRIES LTD

189 Bond Street
PO Box 846
INVERCARGILL
Phone 03 218 2579
Fax 03 214 9168

ROOFCRAFT INDUSTRIES

23 Ashton Street
PO Box 196
GORE
Phone 03 208 5561
Fax 03 208 5571

GET IN TOUCH

For further information visit:
www.marshalls.co.nz