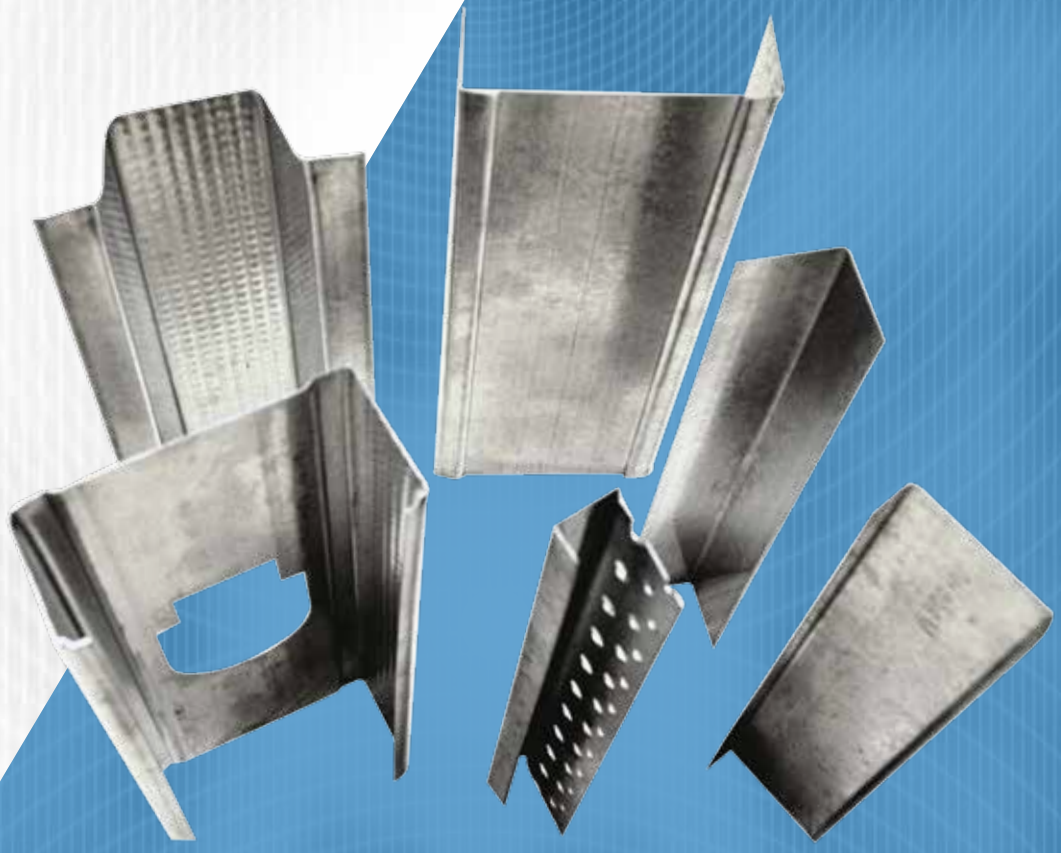
FERREX®

METAL PROFILES AND EXPANSION PRODUCTS



Drywall Partitions & Ceiling Systems

TECHNICS
MIDDLE EAST FZC

Introduction

We are pleased to introduce ourselves, Technics Middle East FZC, As a leading Manufacturer, Exporter, and Supplier, of a comprehensive range of building products that includes Expanded metal products, Partition and ceiling profiles and cable tray management systems, Under our brand name FERREX

Technics is part of a multinational conglomerate with over 40 years of experience in the region in various sectors. The company has satisfied its domestic and overseas clients with various quality products and services since its inception.

With a fully-equipped facility extending over 10000 m^2, and a total build up area of 4000 m^2 in Hamriyah, Sharjah, the factory is equipped with state of the art machinery for manufacturing its products. We differentiate ourselves by offering a complete solution for our clients (Design, Fabrication & Supply). We can ensure timely project completion, end-to-end quality management and budget control. Our employees are trained in the importance of value engineering, thus providing solutions, not just products.

Our team of qualified, experienced engineers and technicians can design and build as per client specifications. We are consistently working on technical innovations in order to improve the characteristics of our products, and monitor our manufacturing processes to continuously optimize it to ensure our clients the highest levels of product quality and workmanship, including on-time completion.

Our mission is to create value for our customers by providing high quality service and products, while maintaining a high level of health and safety standards and at the same time ensuring a healthy environment. Our sense of social responsibility combined with moral business ethics will surely surpass customer expectations, which is of paramount importance to position Technics globally as the best.

Why **FERREX** ?
Why choose us to supply your cold rolled sections when there are so many others in this market? On this there are Five top reasons why we believe you should choose us over the competition.

Five top reasons to choose **FERREX**

- Quality Products
- Competitive Prices
- Delivery on time and in full
- Own Branding Products
- European Standard Approval

Where required products manufactured by TECHNICS meet the necessary standards.

CONTENTS

FERREX
METAL PROFILES AND EXPANSION PRODUCTS

QUALITY

FERREX Building Products manufactured by a quality accredited company

A Quality Assured Company

Build with quality that will last a lifetime.

On The Quality Of Steel

RECYCLABLE

- Steel is 100% recyclable.
- Any wastage in manufacture or on site is totally recyclable.

ENVIRONMENTAL

- Steel is fully recyclable resulting in reduced landfill.
- Roll forming of steel produces very little wastage.
- No pesticides are used in steel framing

TECHNICAL SPECIFICATIONS

Raw Materials Standards

Aluminium

BS EN 573-3:2009, BS EN 485-2:2008
ASTM B209M

Galvanized Steel

BS EN 10346:2009 (formerly BS EN 10142:1991)
Coating Type: Z120,Z180 & Z275
ASTM A653/A653M

Preformed Wire Clip

Galvanized Steel Wire to BS EN 10244-2:2009
ASTM A641/A641M

Hanging Wire

Galvanized Steel Wire to BS EN 10244-2:2009
ASTM A641/A641M

Adjustable Spring Clip

Carbon Steel Strip to BS EN 10132-4:2000
Zinc Plated to BS EN ISO 2081:2008
Phosphated to BS 7371-9:1996

Manufacturing Standards

Drywall Partitioning Systems & Dryline Ceiling Systems

BS EN 10162:2003, BS 5234-1:1992,
BS 7364:1990, BS EN 14195:2005 ASTM C645

Hot Dip Galvanizing After Fabrication

BS EN ISO 1461:1999 (formerly BS 729)
ASTM A123/A123M

Powder Coating

BS 6497:1984

LEEDS

Environmental Impact Statement

Building with steel from FERREX building systems offers an environmental friendly alternative to wood and greatly reduces the impact on global ecological issues.

All FERREX building systems products are manufactured from domestic and international suppliers of steel.

FERREX Building Systems and the LEED Certification

LEED Certification is available on the following points.

MR Credit 2.1(1 point) – Construction waste management program that redirects 50% of the job sites reusable material back to the manufacturing process.

MR Credit 2.2(1 point) – Construction waste management program that redirects 75% of the job sites reusable material back to the manufacturing process.

MR Credit 4.1(1 point) – Use materials with the recycled content such that the sum of post-consumer recycled content plus one half of the pre-consumer content constitutes at least 10% of the cost of the project.

MR Credit 4.2(1 point) - Use materials with the recycled content such that the sum of post-consumer recycled content plus one half of the pre-consumer content constitutes at least 20% of the cost of the project.

MR Credit 5.1(1 point) –10% of the total project must be extracted, processed and manufactured regionally. FERREX Building systems is located in UAE and this credit applies to all projects with in a 500 mile radius.

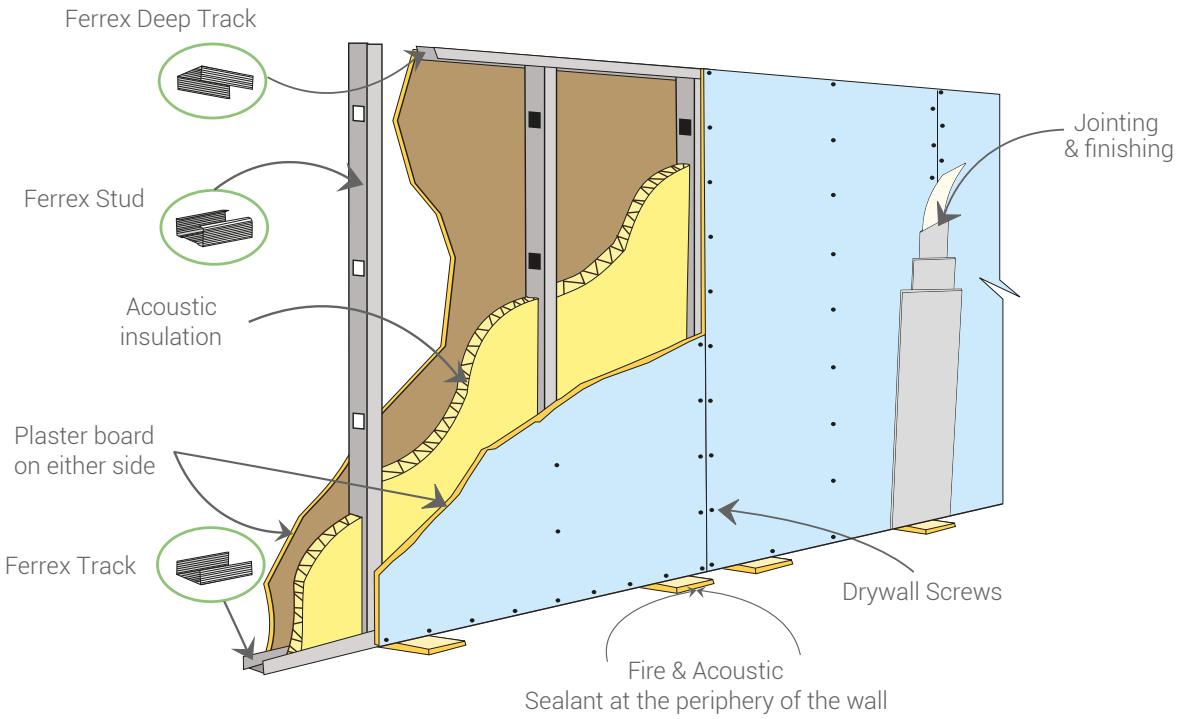
MR Credit 5.2(1 point) – 20% of the total project must be extracted, processed and manufactured regionally. FERREX Building systems is located in UAE and this credit applies to all projects with in a 500 mile radius.

The benefits of FERREX last a lifetime. All FERREX products are 100% recyclable and can be given a second life without any additional preparation. FERREX Building systems recycles 100% of its post industrial scrap.

FERREX
METAL PROFILES AND EXPANSION PRODUCTS

What is Drywall?

Drywall is a high performance light weight partition system consisting of GI steel frame, encased with Gypsum plasterboards on either side attached through self-drilling drywall screws. The joints are then taped and finished with gypsum jointing compounds.



Benefits of Drywall

Speed of Installation
3 to 4 times faster than masonry construction

Dry Construction
Consumes 95% less water than masonry construction

Light Weight
8 to 10 times lighter than masonry systems

Flexibility
in creating and dividing spaces according to your needs

Aesthetic Appeal
Seamless and crack free surfaces, allowing ease of decoration via paint, tiles or wallpapers

Excellent Performance
in terms of fire protection and sound insulation

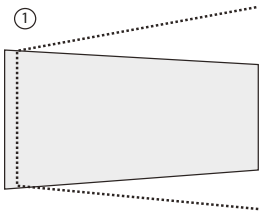
Versatility
The systems enable use in all internal areas of your home and commercial areas

Environment Friendly
Green product which is recyclable and is made of environment friendly material

How to Build a Drywall?

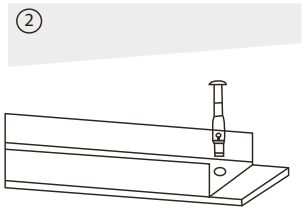
1 Chalk line

Mark the dry wall line on the floor. Mark the door opening. Mark the dry wall line on the ceiling.



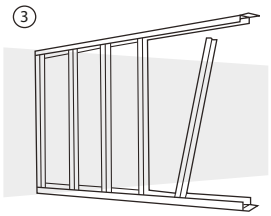
2 Runner Profile

Stick the seal to the runner and attach it to the floor and ceiling with anchor each 400 mm. Mark stud location top and bottom.



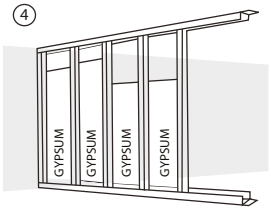
3 Stud Profile

Set the stud minimum 15 mm in the ceiling runner. Space the stud and ensure that all studs are facing the same way. So that, the screw begins on the stable side of the stud.



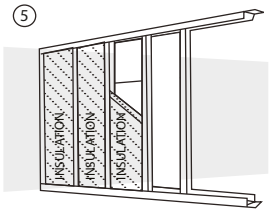
4 Gypsum Board first Wall Side

Gypsum Board should be attached advancing toward the open end of the stud.



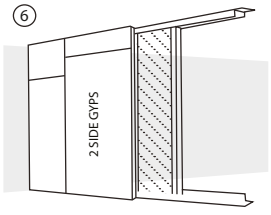
5 Sound Proof Insulation

Set insulation to improve the soundproofing and fireproofing.



6 Gypsum Board second Wall Side

The dry wall receive a further stability through the planking of the second side. The final leveling of the joints and screw heads provide the permanent stability.



Key Design Criteria

a) **Height of the wall** - Drywall can be built up to a height of up to 17m. The height of any Drywall system depends upon the thickness of the partition and the stud spacing. The height can be increased, if required, by using the boxed studs.

b) **Fire rating required** - The fire rating criteria is governed by the National Building Code. The fire rating is calculated on the basis of three things i.e. stability, integrity and insulation.

- **Stability** - The load bearing element must support its design load for the duration of the test.
- **Integrity** - The separating element must resist collapse, the occurrence of holes, gaps or fissures through which flames and hot gases can pass, and sustain flaming on unexposed face.
- **Insulation** - A separating element must restrict the temperature rise of the unexposed face below specified levels (140° C min temperature to 180° C max temperature). Drywall solutions can be designed to give a fire rating of 4 hours of stability, integrity and insulation

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c) **Duty Rating required** - All Drywall partition systems have duty ratings as defined under BS 5234 part 2. The duty rating may vary from Light to Medium too Heavy to Severe. This rating relates to the strength and robustness characteristic of the partition system against specific end use.

d) **Acoustic requirements** - The acoustic requirements of a Drywall system is measured in terms of STC or Rw.

- The Sound Transmission Class (STC) or Rw is a single number rating of a material's or assembly's barrier effect.
- Higher the STC/Rw values, The higher will be the sound insulation of the Drywall. This rating assesses the airborne sound transmission performance at a range of frequencies from 100 Hertz to 4000 Hertz.

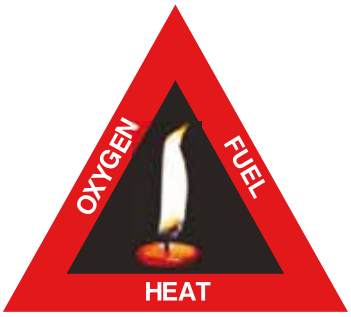
Apart from this, all services requirements (electrical, plumbing etc), and planned and unplanned loading requirements need to be detailed to avoid any sound leakage (loss).

e) **Moisture** - The Drywall system varies with the level of moisture present in the application area. For wet areas, moisture resistant (MR)/cement fibre boards are preferred.

Fire Safety

Fire Protection

- Fire starts when a flammable and/or a combustible material along with adequate supply of oxygen or another oxidizer are subjected to enough heat.
- Fire will sustain only if there is a supply of Heat-Oxygen-Fuel forming the Fire Triangle.
- Removing any one component from the triangle will prevent a fire from starting or will douse it.



Fire protection is achieved by two measures:

- Active measures
- Passive measures

Active Measures

These are the measures which are directly involved in controlling the fire actively.
Examples:

- Smoke alarms; sprinklers; dry risers
- Automatic opening ventilation
- Automatic communication to fire station

Passive Measures

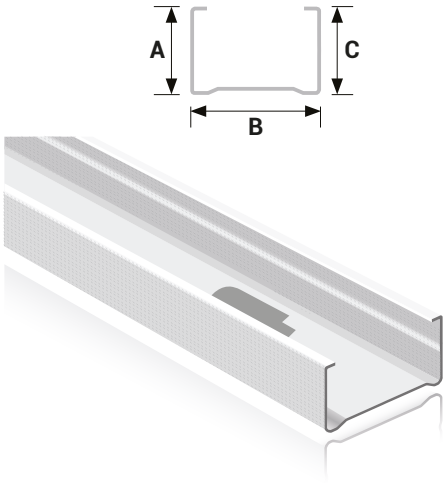
These are the measures which control the spreading of the fire from one side of the surface to the other.

How is Passive Fire Protection achieved?

- Compartmentalisation of fire through the use of walls and their components that bear a prescribed fire resistance.
- Structured to facilitate emergency evacuations and protection.
- Protect the structure of a building and lives of occupants by reducing or preventing internal or external fire spread.
- Provide easy access for firefighting personnel to the affected buildings.
  Examples:
- Materials with no, or very limited, contribution to fire spread elements of construction which provide fire resistance

Stud

Vertically fit the stud into the track. The maximum distance between studs is 610mm. Gypsum boards may be screwed or nailed on the both flanges. Both flanges have slide-proof points to prevent projecting screws from sliding while fixing the gypsum board.



Material Standard: Galvanized Steel-BS EN 10346:2009 (formerly) BS EN 10142:1991)
Coating Type: as per ASTM A653 / A653M.

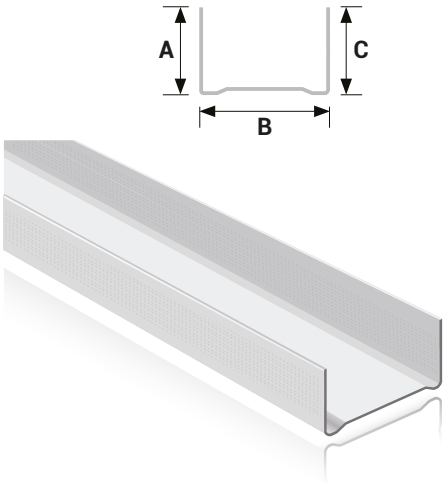
Reference	Dimensions (mm) A B C	Thickness (mm)	Length (mm)	Material
FS 46	32, 46, 34	0.4 to 1.5	3000	Galvanized Steel
FS 50	32, 50, 34	0.4 to 1.5	3000	Galvanized Steel
FS 70	32, 70, 34	04 to 1.5	3000	Galvanized Steel
FS 73	32, 73, 34	0.4 to 1.5	3000	Galvanized Steel
FS 90	32, 90, 34	0.4 to 1.5	3000	Galvanized Steel
FS 98	32, 148, 34	04 to 1.5	3000	Galvanized Steel
FS 148	32, 198, 34	0.4 to 1.5	3000	Galvanized Steel
FS 198	32, 198, 34	0.4 to 1.5	3000	Galvanized Steel

**Other size also available on request*

Application: Used as the certical support in wall framing

Track

The track may be fixed on the surface of ceiling and floor by gunpowder nailing. Choose the track of different width according to the thickness of wall. Better not fix the gypsum boards on the tracks to prove a possible displacement preventing the crack and damage of wall while earthquake happens.



Material Standard: Galvanized Steel-BS EN 10346:2009 (formerly) BS EN 10142:1991)
Coating Type: as per ASTM A653 / A653M.

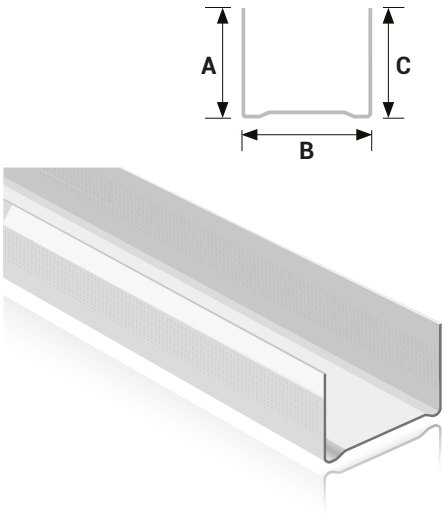
Reference	Dimensions (mm) A B C	Thickness (mm)	Length (mm)	Material
FT 48	25, 48, 25	0.4 to 1.5	3000	Galvanized Steel
FT 52	25, 52, 25	0.4 to 1.5	3000	Galvanized Steel
FT 72	25, 72, 25	04 to 1.5	3000	Galvanized Steel
FT 75	25, 75, 25	0.4 to 1.5	3000	Galvanized Steel
FT 92	25, 92, 25	0.4 to 1.5	3000	Galvanized Steel
FT 100	25,100, 25	04 to 1.5	3000	Galvanized Steel
FT 150	25,150, 25	0.4 to 1.5	3000	Galvanized Steel
FT 200	25, 200, 25	0.4 to 1.5	3000	Galvanized Steel

**Other size also available on request*

Application: Designed for securing wall studs at floor and ceiling junctions.
Fixed to floor and ceiling to accommodate studs

Deep Track

Used for partitions with heights exceeding 4.2m, or at the soffit where a Extra head is required.



Reference	Dimensions (mm) A B C	Thickness (mm)	Length (mm)	Material
FDT 48	32, 48, 32	0.4 to 1.5	3000	Galvanized Steel
FDT 52	32, 52, 32	0.4 to 1.5	3000	Galvanized Steel
FDT 72	32, 72, 32	04 to 1.5	3000	Galvanized Steel
FDT 75	32, 75, 32	0.4 to 1.5	3000	Galvanized Steel
FDT 92	32, 92, 32	0.4 to 1.5	3000	Galvanized Steel
FDT 100	32, 100, 32	04 to 1.5	3000	Galvanized Steel
FDT 150	32, 150, 32	0.4 to 1.5	3000	Galvanized Steel
FDT 200	32, 200, 32	0.4 to 1.5	3000	Galvanized Steel

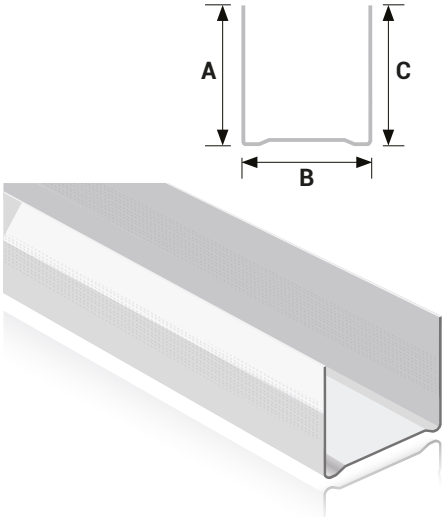
Material Standard: Galvanized Steel-BS EN 10346:2009 (formerly) BS EN 10142:1991)
Coating Type: as per ASTM A653 / A653M.

**Other size also available on request*

Application: Designed for securing wall studs at floor and ceiling junctions.
Fixed to floor and ceiling to accommodate studs

Extra Deep Track

Extra Deep Track is designed for application where more Head is needed. This allows for the movement of floor beams or decks above interior partitions.



Reference	Dimensions (mm) A B C	Thickness (mm)	Length (mm)	Material
FEDT 48	50, 48, 50	0.4 to 1.5	3000	Galvanized Steel
FEDT 52	50, 52, 50	0.4 to 1.5	3000	Galvanized Steel
FEDT 72	50, 72, 50	04 to 1.5	3000	Galvanized Steel
FEDT 75	50, 75, 50	0.4 to 1.5	3000	Galvanized Steel
FEDT 92	50, 92, 50	0.4 to 1.5	3000	Galvanized Steel
FEDT 100	50, 100, 50	04 to 1.5	3000	Galvanized Steel
FEDT 150	50, 150, 50	0.4 to 1.5	3000	Galvanized Steel
FEDT 200	50, 200, 50	0.4 to 1.5	3000	Galvanized Steel

Material Standard: Galvanized Steel-BS EN 10346:2009 (formerly) BS EN 10142:1991)
Coating Type: as per ASTM A653 / A653M.

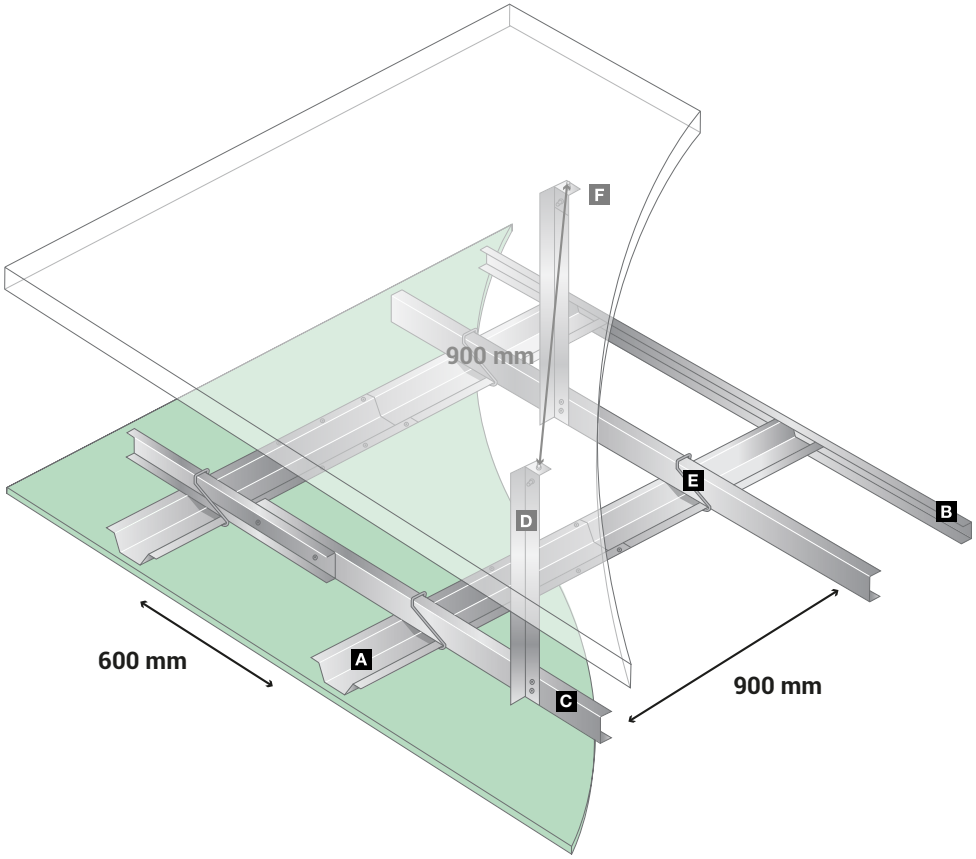
**Other size also available on request*

Application: Designed for securing wall studs at floor and ceiling junctions.
Fixed to floor and ceiling to accommodate studs

Ceiling furring system

Our Ceiling system has a wide range of applications including both residential and commercial. It can be used to both upgrade and protect existing ceiling structures. Varying ceiling heights can be achieved to accommodate the varying ducting and services that are used in the market place today. Our ceiling system is compatible with all proprietary plasterboards.

Key
A) Furring Channel
B) Wall Angle
C) Main Channel
D) Angle Section
E) Wire Clip
F) Angle Cleat

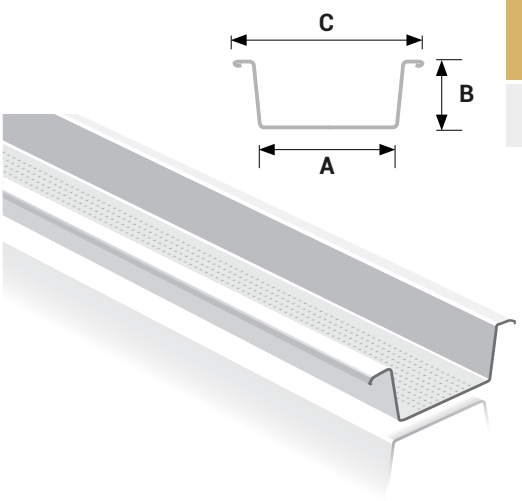


Key Benefits

- Quick and simple to construct and install.
- Our System is suitable for any type of proprietary plasterboard
- Products can be easily cut to required length using appropriate cutting tools
- Insulation for improved sound and thermal properties is easy to install.
- Can be used to create a perfect finish to achieve most types of decorative finishes.

Furring Channel

Furring channel is a hat-shaped corrosion-resistant framing component used to furr out masonry walls and ceiling assemblies. In concrete wall applications, furring channel is installed vertically to the wall surface using concrete nails or power-driven fasteners. Gypsum panels are then screw-attached to the furring channels. In drop ceiling applications, furring channels can be attached directly to the underside of the building structure using metal furring channel clips, tie wire, screws or power-driven fasteners.



Reference	Dimensions (mm) A B C	Thickness (mm)	Length (mm)	Material
FFC 35	35, 22, 70	0.4 to 1.5	3000	Galvanized Steel

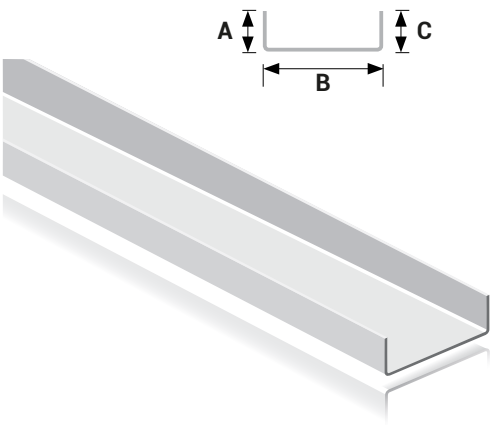
**Other size also available on request*

Other application: Used as the certical support in wall framing

Material Standard: Galvanized Steel-BS EN 10346:2009 (formerly) BS EN 10142:1991)
Coating Type: as per ASTM A653 / A653M.

Main Channel

Main Channel sections are cold roll formed from zinc coated steel strip it is the primary member (carrying channel) for Conventional Ceiling metal framework. This is suspended from the roof with wire hanger, adjustment clip and channel hanger.



Reference	Dimensions (mm) A B C	Thickness (mm)	Length (mm)	Material
FMC 38 A	12 38 12	0.4 to 2	3000	Galvanized Steel
FMC 38 B	15 38 15	0.4 to 2	3000	Galvanized Steel

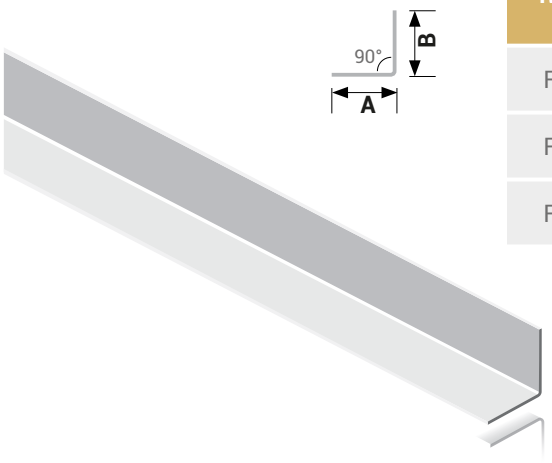
**Other size also available on request*

Application: Used as the certical support in wall framing

Material Standard: Galvanized Steel-BS EN 10346:2009 (formerly) BS EN 10142:1991)
Coating Type: as per ASTM A653 / A653M.

Wall Angle

Corner angle is a multipurpose 90˚ or 120˚/135˚ galvanized angle used in dozens of framing applications. Some of the most common applications include lapped framing conditions, soffit framing, floor and ceiling runner, chase wall construction and laminated gypsum drywall partitions.



Reference	Dimensions (mm) A B	Thickness (mm)	Length (mm)	Material
FWA 25	25, 25	0.4 to 1.5	3000	Galvanized Steel
FWA 30	30, 30	0.4 to 1.5	3000	Galvanized Steel
FWA 50	50, 50	0.4 to 1.5	3000	Galvanized Steel

**Other size also available on request*

Application: Fix around walls / partitions

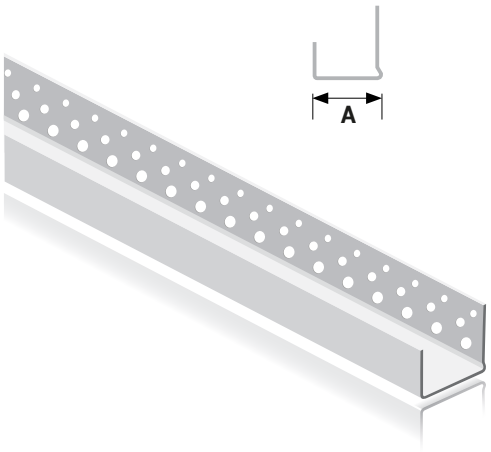
Material Standard: Galvanized Steel-BS EN 10346:2009 (formerly) BS EN 10142:1991)
Coating Type: as per ASTM A653 / A653M.

Dry Wall Edge Bead Perforated / Board Channel Perforated

Galvanised steel edge trim for drywall applications used to protect exposed plasterboard edges whilst forming a defined edge to the plasterboard. Drywall Edge Bead has an asymmetric profile with one perforated leg and pre-formed arris to accommodate jointing material.

Key Features & Benefits

- Used to cap the ends of plasterboards which may be exposed in their installation
- Incorporates a raised metal bead, providing a clean straight edge



Reference	Dimensions (mm) A	Thickness (mm)	Length (mm)	Material
FBC 15	15	0.35 to .5	3000	Galvanized Steel

**Other size also available on request*

Application: Fix around walls / partitions

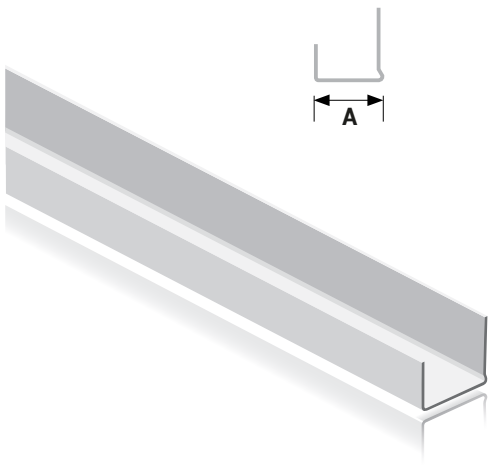
Material Standard: Galvanized Steel-BS EN 10346:2009 (formerly) BS EN 10142:1991)
Coating Type: as per ASTM A653 / A653M.

Dry Wall Edge Bead Plain / Board Channel Plain

Drywall Metal Edge Bead is a galvanised steel channel which forms a defined edge to plasterboard areas

Key Features & Benefits

- Used to cap the ends of plasterboards which may be exposed in their installation
- Incorporates a raised metal bead, providing a clean straight edge



Reference	Dimensions (mm) A	Thickness (mm)	Length (mm)	Material
FBCP 15	15	0.35 to .5	3000	Galvanized Steel

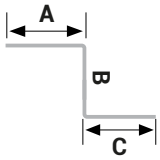
Other size also available on request

Application: Fix around walls / partitions

Material Standard: Galvanized Steel-BS EN 10346:2009 (formerly) BS EN 10142:1991)
Coating Type: as per ASTM A653 / A653M.

Z - Trim

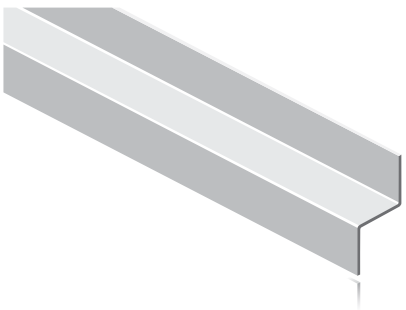
A trim designed to hold rigid insulation in place and provide a face to fasten finishing (drywall, siding, etc.). Suitable for interior or exterior application. Stocked for 1 1/2" and 2" insulation thickness.



Reference	Dimensions (mm) A B C	Thickness (mm)	Length (mm)	Material
FZT 20 A	20 19 19	0.4 to 1.4	3000	Galvanized Steel
FZT 25 B	25 20 20	0.4 to 1.4	3000	Galvanized Steel

Other size also available on request

Application: Fix around walls / partitions



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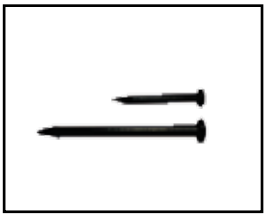
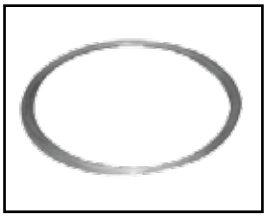
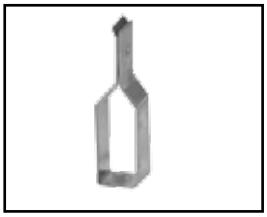
FERREX
METAL PROFILES AND EXPANSION PRODUCTS

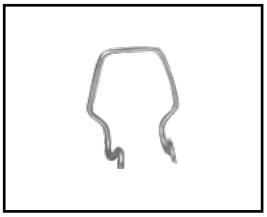
ACCESSORIES


Adjustable Spring Clip

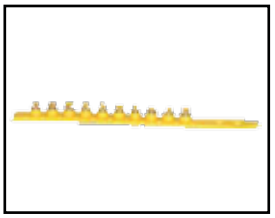

Steel Nails

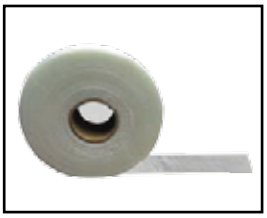

Hanging Wires


Main Channel Bracket


Wire Clip

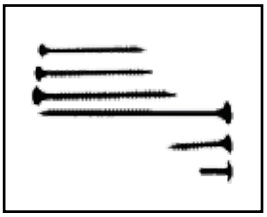

Ceiling Clip Nail

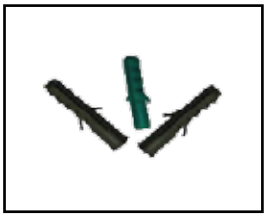

Ceiling Cartridge

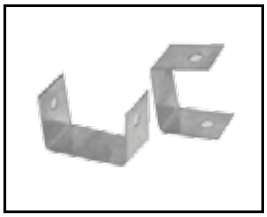

Fiber Tape

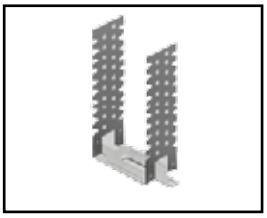

Gypsum Boards

Gypsum Compound Ready Mix

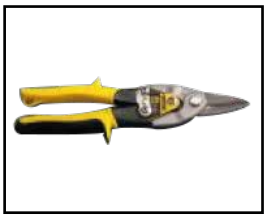

Screws


Rawlplug


C-Clamp Channel


Fixing Bracket

Measure Tape


Steel Cutter


Hand Planer


Chalk Liner


Utility Knife


Drilling Machine


Ceiling Gun

DELIVERY

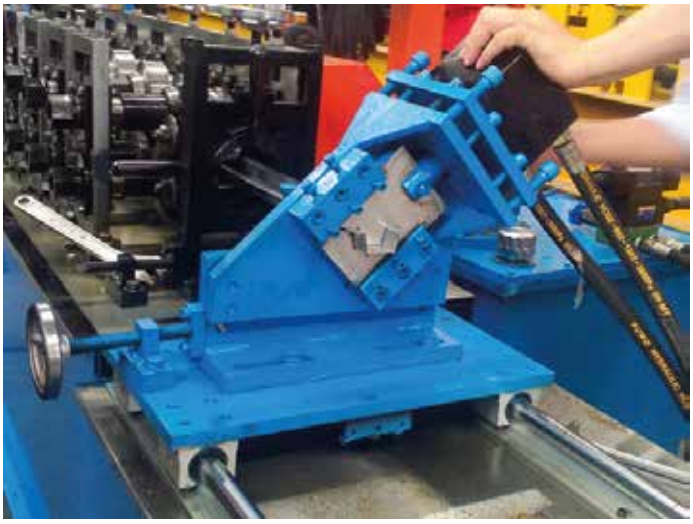
All products are sold in accordance with Technics standard terms and conditions.

Marketing

Technics has a large network of freight carriers that allow us to provide exceptional customer service. Technics strives to ship all shipments within stipulated delivery time.

Special orders

Technics has machinery that is the latest technology allowing us to produce special lengths and sizes quickly and efficiently to keep your orders on schedule.



Packaging

Technics uses quality packaging materials to ensure that our products arrive to you in good condition.

MATERIALS SAFETY & DATA SHEET

Materials

All sections are manufactured from high quality zinc coated steel which is light and easy to handle and fasten, has corrosion protection and is immune from biological attack in all its forms. Where severe corrosive conditions prevail, such as acids and salt sprays, extra precautions will be required to ensure the life of the product. Consult FERREX Building systems under these circumstances.

Packaging handling and storage

All framing sections are supplied in strapped bundles of varying weight and length. It is always desirable to leave the strapping in place until they are required as loose elements can be susceptible to damage. Bundles should be kept dry by storing under cover or covering with plastic sheeting as moisture can damage the coatings leading to reduced life and unsightly appearance.

Safety

Care should be taken when handling steel components as sharp edges can cause harm. Protective gloves should be worn by all workmen. Persons who suffer from allergies & sensitive skin conditions should handle metal products with caution or seek an opinion from the medical professional. Hands should be washed after handling steel components for personal hygiene. If cutting is required all operators should wear protective goggles, gloves and hearing protection, when using grinders, cutting wheels etc.

Technics Head quarters in Sharjah

LOCATION MAP

TECHNICS
MIDDLE EAST FZC

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