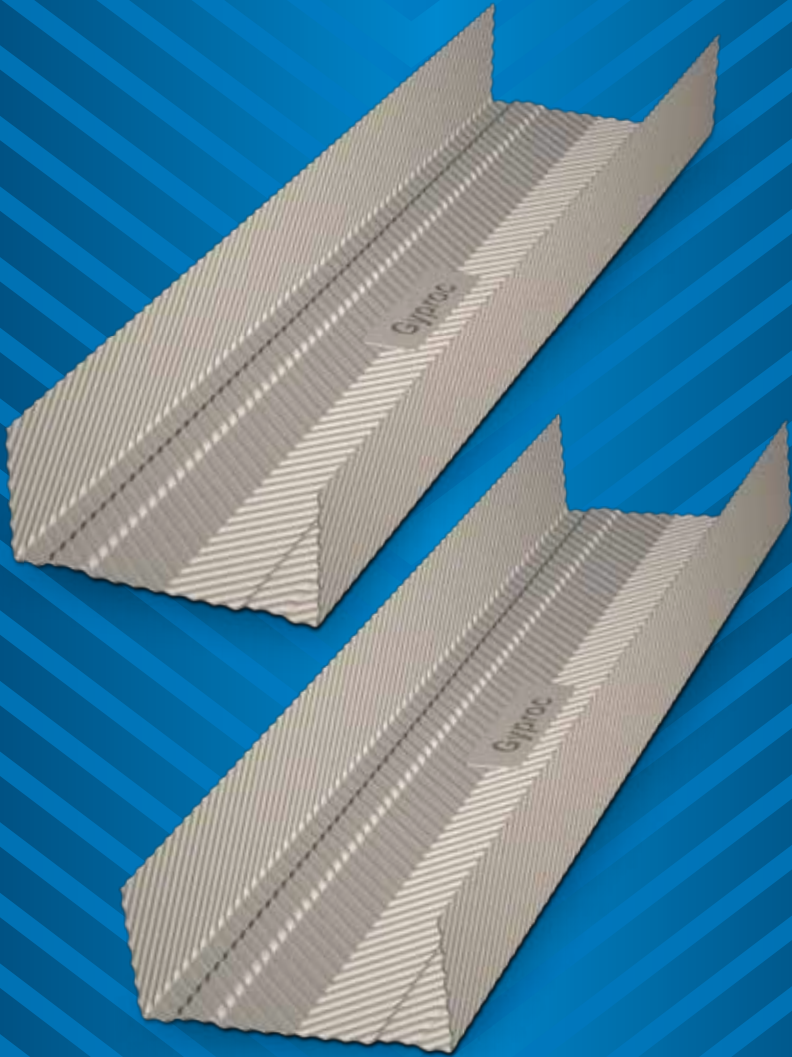


# GypSerra™

Metal Framing

Patent Application No : 201741018271



Member of:





## SpecSure®

All of the Gyproc proprietary systems in this literature are covered by the SpecSure® Performance Warranty.

- Our guarantee is that they will perform to the parameters published in our current literature for the period of time that the systems are used for their originally designed purpose
- Our guarantee is of absolute peace of mind when specifying Gyproc systems

## Introduction

Gyproc is the world's no. 1 false ceiling and drywall solutions company. It has been a pioneer and market leader in offering plasterboard based solutions in India for the past 2 decades.

Gyproc offers a comprehensive metal framing and accessories range to meet the challenges of modern day construction. Our range of metal framing provide basic support, strength and integrity to the false ceilings and drywall systems.

The thoroughly engineered products aid in achieving the following parameters for the system.

**Innovation**

**Superior Performance**

**Durability**

Manufacturing of **GypSerra™** uses less metal, which reduces the impact on the environment. It also results in products those are lighter so you can ship more on each load, lowering transport related pollution too.

- Our engineers develop highly efficient product designs that perform flawlessly, resulting in very economical metal usage
- State-of-the-art manufacturing plant ensures high accuracy and low waste

Thus **GypSerra™** helps in achieving any project to become green.

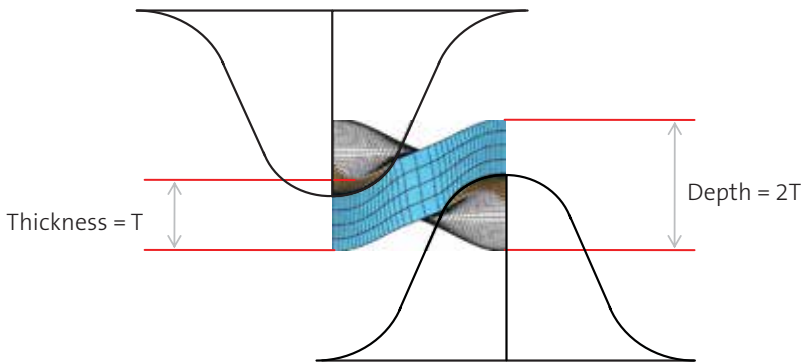
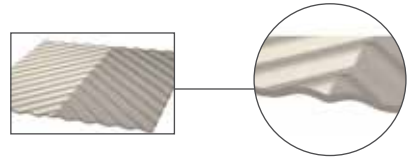
# Technology

**GypSerra™ metal profiles are produced with an innovative & Patent Applied Serration process which produces a unique serrated pattern across the surface of the material ; Which results in to:**

- Increased Surface Area (8% more than plain sheet)
- Doubled Surface Thickness (than plain sheet)
- Stronger Surface due to work hardening
- Increased load carrying capacity (10% higher than Knurled Sections)

## The GypSerra™ Process

- Effective thickness improvement during production (2x depth)
- Base material gauge (T)
- Effective thickness after production (2T)



**Finished product - Unique & Superior with complete serrated surface With unique “embossing” of Gyproc logo on every section**



# Engineering

## Our engineering aims to deliver

Make sections stronger

Reduce risk of failure

Provide flexibility in design

## Parameters

### Design

Detailing of sections with accuracy in dimensions of each and every arc & bend

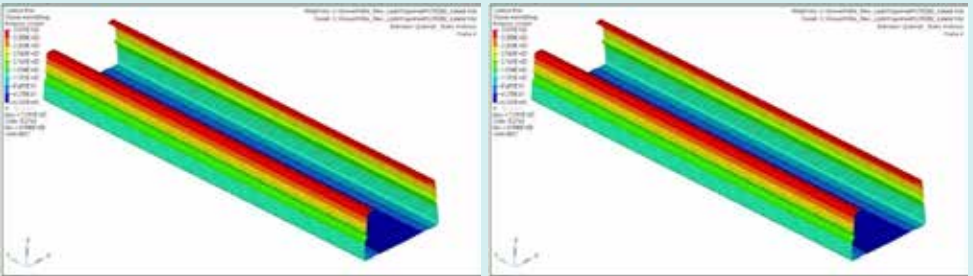
### Properties

Study of physical properties as per the profile and shape, to deliver high performance

### Development

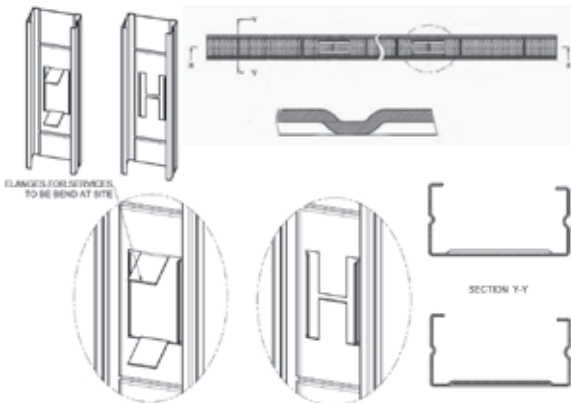
Continuous development of the profile to improve the quality, strength and features of sections

## Strength Analysis



Study physical properties for testing deflection in stud sections, yield strength and tensile strength

## Dimension



Detailed working on each bend and curve of sections to achieve error free manufacturing, and desired performance

# Raw Materials

Our raw material passes through a series of checks & stringent controls to ensure high quality.

## Raw Material Selection Process

### High Quality Assured

High Quality Commercial Grade Steel as per IS 513

+

Check Strength

+

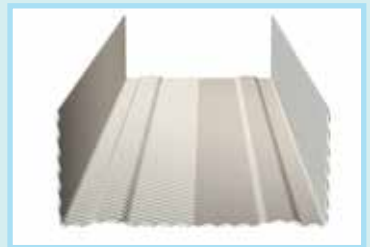
Bend Test

+

Hardness Test



Reliable and Stronger Sections



\* All Tests as defined by IS Standards

### Galvanisation Check

Item	Observed Value
Weight of Iron Coating (G/DM <sup>2</sup> )	0.524
Weight of Zinc Coating (G/DM <sup>2</sup> )	1.10
Weight of Alloy Coating (G/DM <sup>2</sup> )	1.08

**National Test House**

**Salt Spray Test and certified by Government Institute**

### Gauge & Strip Width Check



Micrometre Gauge

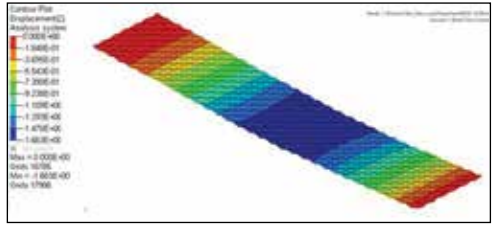


Vernier Gauge

# Sheet Capacity & Deflection



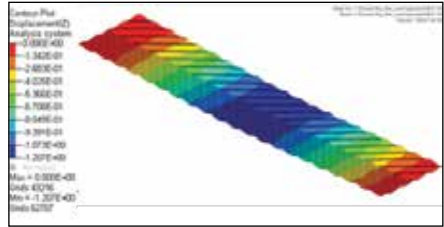
Knurled Sheet



Deflection : 1.663



Serrated Sheet



Deflection : 1.207

Improved Sheet Capacity & lower Sheet Deflection than Knurled Sheet

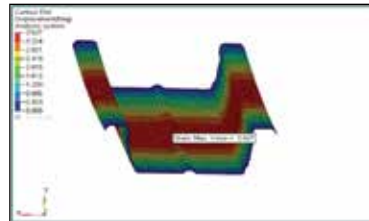
27%



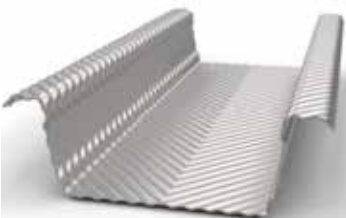
## Load Bearing Capacity of Ceiling



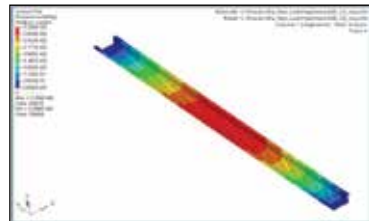
Knurled Ceiling Section



Deflection : 3.627mm



Serrated Ceiling Section



Deflection : 3.25mm

Improved Load bearing capacity for Ceiling

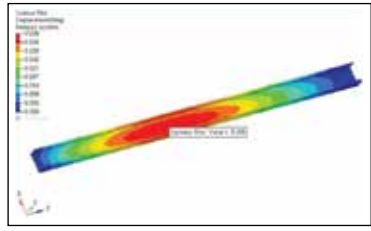
10%



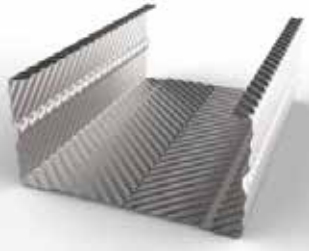
## Deflection due to Self Weight in Studs



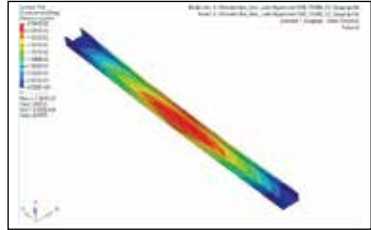
Knurled C-Stud



Deflection : 0.038mm



Serrated C-Stud



Deflection : 0.035mm

8% less deflection due self weight than  
Knurled Sections

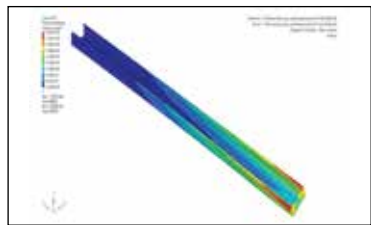
8%



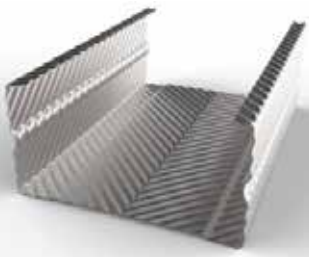
## Resistance to Twist in Studs



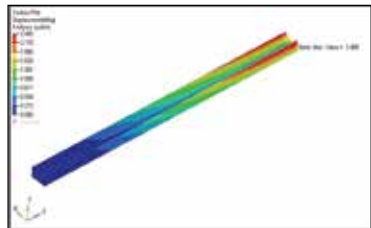
Knurled C-Stud



Deflection : 3.61mm



Serrated C-Stud



Deflection : 2.45mm

30% higher Twist Resistance than  
Knurled Sections

30%



# Product Range

## GypSerra™ Partition Framing System:

All components in GypSerra™ Partition Framing System are with Al-Zn coating of 150 gsm which provides superior corrosion resistance ( upto 5 times than Zn 120 gsm)

### Floor and Ceiling Channel



#### Application

Fixed to floor and ceiling for securing GypSerra™ wall studs

#### Dimensions in mm:

50 x 32 x 32 x 3660	72 x 32 x 32 x 3660
94 x 32 x 32 x 3660	148 x 32 x 32 x 3660

### 'C' Stud



#### Application

Used as the vertical support in wall framing

#### Dimensions in mm:

48 x 34 x 36 x 3050/3660	70 x 34 x 36 x 3050/3660
92 x 34 x 36 x 3050/3660	146 x 34 x 36 x 3050/3660

### AcouStud



#### Application

Used as the vertical support in wall framing. This is a specialist stud which will give high acoustic performance

#### Dimensions in mm:

70 x 41 x 44 x 3050/3660	146 x 41 x 44 x 3050/3660
92 x 41 x 44 x 3050/3660	

### Noggin Channel



#### Application

Used for horizontal support

#### Dimensions in mm:

48 x 40 x 0.5 x 390/492/695	70 x 40 x 0.5 x 390/492/695
92 x 40 x 0.5 x 390/492/695	Length: 695/492/390

### I Stud



#### Application

For shaftwall

#### Dimensions in mm:

48 x 38 x 3050/3660	70 x 38 x 3050/3660
92 x 38 x 3050/3660	146 x 38 x 3050/3660

Metal Thickness: 0.5mm (48mm stud), 0.7mm (70/92/146 mm studs), 0.9mm (92/146 mm studs) Retaining channel and starter channel of suitable sizes are also available for fixing of I Stud

## GypSerra™ Ceiling Framing System:

All components in GypSerra™ Ceiling Framing System are with Zn coating of 150 gsm which provides increased corrosion resistance

### Ceiling Section



#### Application

The main supporting section to fix plasterboard

Dimensions in mm: 80 x 26 x 51 x 3660

### Perimeter Channel



#### Application

Fix around walls/partitions

Dimensions in mm: 20 x 28 x 30 x 3660

### Intermediate Channel



#### Application

Primary section to support the ceiling section

Dimensions in mm: 15 x 45 x 15 x 3660

### Ceiling Angle



#### Application

To provide suspensions from the structural soffit

Dimensions in mm: 25 x 10 x 3660

# The Product Range

## Gyproc® - Accessories

### Connecting Clip



#### Application

Used to connect ceiling section or U section to intermediate channel or tube section respectively

Dimensions in mm: 2.64 Ø

### Rawl Plug



#### Application

Expandable fastener to hold the ceiling

Dimensions in mm: 8Ø x 45 mm

### Soffit Cleat



#### Application

To hold the ceiling angle / MS Flat / Level clip suspensions of framework from the structural soffit

Dimensions in mm: 27 x 37 x 25 x 1.6

### Drywall Screw



#### Application

Corrosion resistant self-tapping bugle head case hardened, grey phosphated steel screws  
To fix plasterboard to metal framework

Dimensions in mm: 3.5 x 25 | 3.5 x 35 | 3.5 x 50

### Metal to Metal Screws



#### Application

For screwing between metal sections. Self-drilling type Zinc plated metal to metal screws with wafer cross-head.

Dimensions in mm: 4.2 x 13

## Screw Phillips Pan head hex nut & bolt



### Application

To Fix Ceiling angle with Soffit Cleat, also to connect ceiling angle with intermediate channel

**Dimensions in mm:** M6 hex nut & M6x12mm hex bolt

## Angle Bead



### Application

Perforated galvanized metal bead for reinforcing external 90° angles where maximum protection is required

**Dimensions in mm:** 25 x 25 x 2440 | 25 x 25 x 3660

## Edge Bead



### Application

Galvanized metal bead, having an asymmetric profile with one perforated leg to accommodate jointing material. It is used to protect the exposed and unsupported edges of plasterboard. Also used to form perimeter detail to cover the edges of plasterboard

### Dimensions in mm:

25 X 10 X 9.5 X 2440	25 X 10 X 9.5 X 3660
25 X 10 X 12.5 X 2440	25 X 10 X 12.5 X 3660
25 X 10 X 15 X 2440	25 X 10 X 15 X 3660

## Shadowline Stopping Bead



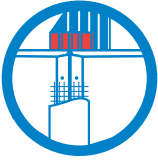
### Application

Shadowline stopping bead is a semi perforated galvanized section used for minimizing the appearance of non-aligned walls and ceilings by giving a clean, straight, shadow edge on installation and finishing. They are suitable for ceiling perimeters, door jambs, windows, etc.

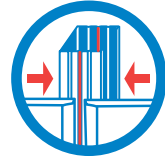
**Dimensions in mm:** 0.4 X 9 X 10 X 28

# GypSerra™ Advantages

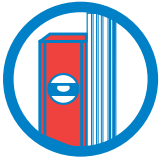
Longer Life, High Performance,  
Higher Safety & User Friendly Systems with  
GypSerra™



Achieve significant flatness on wall and reduction in the risk of developing cracks in joints



Center of GypSerra™ can be easily identified for conveniently screwing the plasterboards



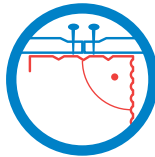
The longitudinal ribs provide stiffness and help in getting the proper alignment



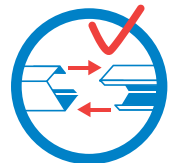
Easy to cut onsite for faster implementation and overlapping



High stiffness makes GypSerra™ more secure and capable of taking the plasterboard load



Screws do not slip and hence does not damage the plaster boards during installation on GypSerra™



Easy to boxing of studs due to accuracy in dimensions and correct placement of ribs





The Saint-Gobain group founded in 1665, is one of the world's 100 largest industrial groups and the world no. 1 in building materials. It operates in four core sectors – Building Distribution, Innovative Materials, Packaging and Construction Products. Saint-Gobain operates in over 59 countries worldwide and fields a workforce in excess of 208,000. Saint-Gobain is a world leader in each of its competencies. The future strategy of Saint-Gobain is focused on attaining “worldwide leadership in construction markets, offering innovative solutions to meet the fundamental global challenges of growth, energy and environment”.

Saint-Gobain Gyproc India Ltd. is a market leader in the interior construction space in India for well over 2 decades. The ever expanding product range includes gypsum plasterboard systems for false ceiling & drywall applications, ceiling tiles (gypsum, mineral fibre tiles, glass wool acoustic) for grid ceiling applications, gypsum plasters for internal wall finishes plus a complete range of accessory products.

The entire gypsum plaster board, ceiling tiles and gypsum plaster range of products are approved by CII - IGBC for consideration towards Green Building rating systems (LEED) points.



-  Sales Offices
-  Plant Locations

The contents of this manual are covered by copyright laws. Reproduction of all or any part without the owner's permission is prohibited. All illustrations are subject to change. Whilst every care has been taken in the preparation of this product guide Gyproc expressly disclaims all and any liability to any person whether a purchaser of any product details of which are set out in this manual, or otherwise in respect of anything done or omitted to be done and the consequences of anything done or omitted to be done, by any such person in reliance, whether in whole or in part upon the whole or part of the within information.

GypSerra™ is a trademark of Saint Gobain India Pvt Ltd and is produced with a Patent Applied process (Patent Application No: 201741018271).

## CONTACT US:

E- mail: [gyprocindia@sanint-gobain.com](mailto:gyprocindia@sanint-gobain.com)

Website: [www.gyproc.in](http://www.gyproc.in)

Toll Free: 1800 103 7897

