



Resorts, Bhubaneswar

# Resorts

Design flexibility offers variety of truss shapes desired by upscale & elegant resorts.

# Roof Tops

Versatile usage of material ensures covering up each unused space on terraces.



Notre Dame Acedamy, Patna



Farm House, Indore



Anganwadi, Purua

# Residential

Weekend homes concept are now a reality with assured & safe solutions.

# Anganwadi

Ideal solution for infrastructure applications.



CP Aqua, Pondicherry

# Fish Culture Sheds

ZINCALUME® steel members ensure durable & quick solution for large fish culture farms.

# Poultry Farms

Agro businesses are now modern and equipped with state of the art infrastructure

Poultry farm, Chennai





**Conventional**

**VS**

**EZYBUILD®**



### Design

With EZYBUILD® one can build variety of structures along with integration on existing ones



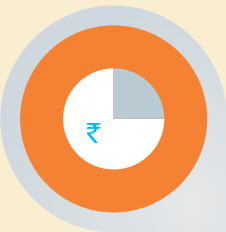
**3 months to 2+ Year**

### Timelines

The time from the start of construction work to completion



**4 weeks to 2 months**



### Construction Costs

Cost of construction for EZYBUILD® structures is upto 35% lesser compared to traditional ones



### Maintenance

EZYBUILD® technology assures least maintenance



### Green Solutions

EZYBUILD® solutions are reusable, recyclable and 100 % lead free



### Flexibility

EZYBUILD® modular buildings are versatile in terms of expansion and relocation



EZYBUILD® Solutions are available through Authorised EZYBUILD® / LYSAGHT® Solutions Centers

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Authorised EZYBUILD® Solutions Provider



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**EZYBUILD**<sup>®</sup>

S O L U T I O N S

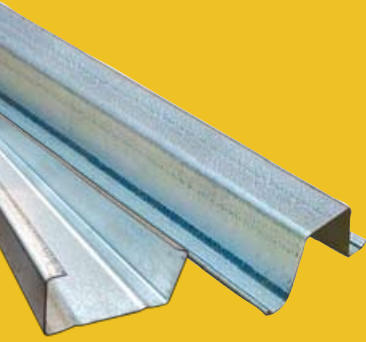
# SMARTRUSS<sup>®</sup>

*Trusted roof support solutions*



Strong & Durable | Long Term Corrosion Resistance | Maintenance Free  
Construction with Ease and Speed | Termite Free, Rot Free, Warp Free and Fire Resistant

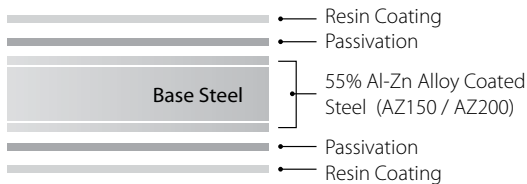
  
**TATA BLUESCOPE  
STEEL**



Anganwadi, Puruia

SMARTRUSS® solution from Tata BlueScope Steel is an advanced, lightweight framing technology for all your roof support solutions!

## What makes SMARTRUSS® a Truly Smart Solution?



Cross Sectional View of ZINCALUME® steel

SMARTRUSS® members are made from ZINCALUME® steel which is zinc and aluminum alloy coated steel with AZ150 coating mass with yield strength of 550 MPa. On an average ZINCALUME® steel (AZ150 coating) lasts up to four times longer than galvanized (zinc coated Z275 coating) steel in similar environmental condition.

## Advantage of SMARTRUSS®

### Why SMARTRUSS®



- Fasteners system, safe to erect
- Easy and quick to install



- Light-weight, easy to handle and erect



- No painting required
- ZINCALUME® steel structural members last longer & give seamless construction

### Why not Mild Steel



- Lesser safety during site fabrication
- Requires welding
- Needs skilled labour



- Heavy steel sections are difficult to handle and erect



- Requires painting to protect steel from corrosion
- Higher maintenance cost

### Why not Timber



- Material inconsistency



- Affected by termites



- Highly inflammable

# SMARTRUSS®

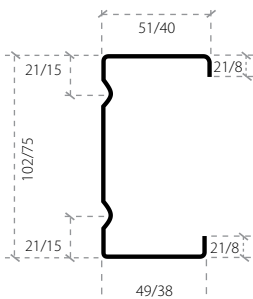
## Design Advantage

SMARTRUSS® system has been extensively tested in BlueScope Steel's Research and Development laboratory in Sydney, Australia, and is fully computer designed with SUPRACADD™ software linked to sophisticated Computer Aided Manufacturing, ensuring faster, accurate and consistent project delivery.

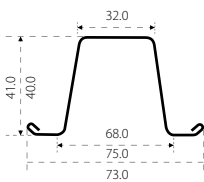
SMARTRUSS® designs conforms to established International Standards and Design Codes.



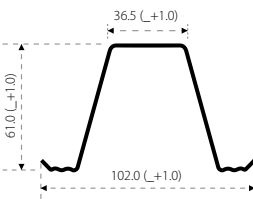
### Unique Components



S100 / S75 Section



Top Span 40



Top Span 61

All dimensions are in mm.

### Technical Properties

Description	Name	Units	S75 x 0.75 Full Section	S75 x 1.0 Full Section	S100 x 1.0 Full Section
Area	A	mm <sup>2</sup>	122.3	159.01	216
Moment of Inertia	I <sub>xx</sub>	mm <sup>2</sup>	112700	143109	362000
Moment of Inertia	I <sub>yy</sub>	mm <sup>2</sup>	23860	26467	71330
Modulus of Section	Z <sub>xx</sub>	mm <sup>2</sup>	2998	3772.0	7102
Modulus of Section	Z <sub>yy</sub>	mm <sup>2</sup>	879.3	1016.7	2070
Radius of Gyration	R <sub>xx</sub>	mm	30.35	30.00	40.94
Radius of Gyration	R <sub>yy</sub>	mm	13.96	12.9	18.17
Torsion Constant	J	mm <sup>4</sup>	22.94	53.00	72.01
Warping Constant	I <sub>w</sub>	mm <sup>6</sup>	26300000	28827974	150300000
Shear Centre Co-ordinate	Y <sub>o</sub>	mm	1.072	1.827	1.185
Yield strength	f <sub>y</sub>	MPa	550	550	550
Design Strength in tension, compression and bending	f	MPa	425	425	472
Design strength in shear	f <sub>v</sub>	MPa	245	245	275

### Various Roofing Options



Also compatible with other roofing options such as shingles etc.

### Types of Trusses



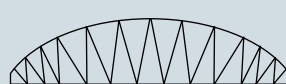
Symmetrical



Monoslope Truss



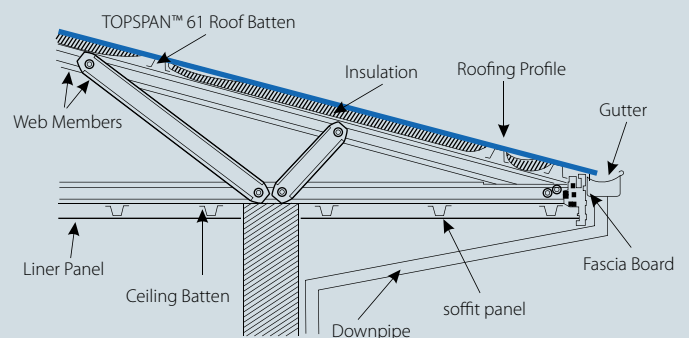
Truncated Truss



Radial Truss

Drawings are indicative only.

### Cross section of SMARTRUSS® roofing solution

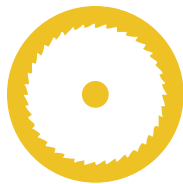


# Smart Steps of Construction Process

Designed with minimum fabrication tools



Drill Gun



Rotary Disk Cutter



Hand Shearer

SMARTRUSS® solution components are light weight with high strength.

The solution is based on lean construction methodology which ensures:

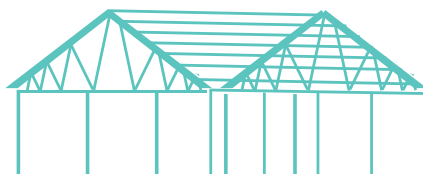
- Speedy Construction
- Early Utilization
- Faster Returns



**1** Using top and bottom chord, create the triangle frame of the truss



**2** Install subsequent trusses over the truss template



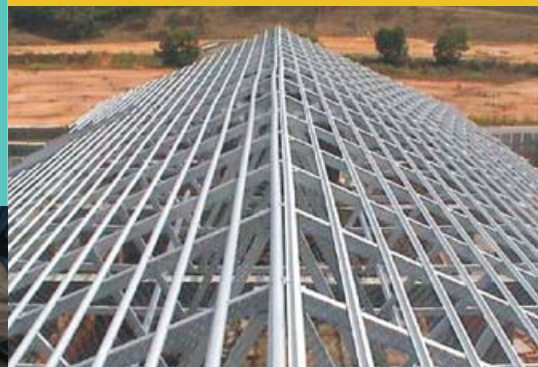
**3** Use drill gun to fasten the screw at the bottom chord and web members



**4** Install L-Brackets to the beam and fix trusses to the L-Bracket using self tapping fasteners



**5** Fix battens to the trusses with recommended spacing



**6** Finished roof trusses are ready for roofing

