# LYSAGHT® SMARTRUSS®

Steely Support For Your Biggest Visions



 ${\it LYSAGHT}^{\it @}$  SMARTRUSS  $^{\it @}$  System conforms to JKR Specifications & CIBD IBS Requirement



### **SMARTRUSS®**

# FAST, EFFICIENT, WELL-ENGINEERED STEEL TRUSS SOLUTION

**SMARTRUSS**® is a roof truss system that offers durability, affordability, strength, stability and compatibility with traditional building methods.

## **ADVANTAGES OF SMARTRUSS®**

#### **STRONG**

- Made using **TRUECORE®** G550 steel which is 30% stronger than mild steel
- Strength to weight ratio superior to all other common building materials
- New shape more efficient allowing lighter gauge to be used

### **High Buildability Score**

- Pre-fabricated roof trusses
- Reduced site labour
- Increased quality control

### Lightweight

- Easily handled
- Low cranage costs
- Lower foundation costs

#### **Durable**

- Resistant to, and limits the spread of, fire
- Termite, moisture and fungus resistant
- Electrically safe when properly earthed

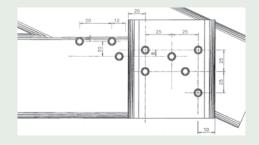
### **Design Flexibility**

- High strength to weight ratio
- Provides larger spans and requires fewer supports
- Design tools facilitate structural design

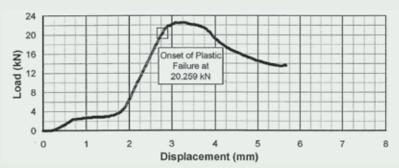








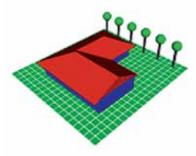
Heel Bearing Test of C75 1.0mm BMT Section with Short Stiffener and 9 off #12-14x20 Teks



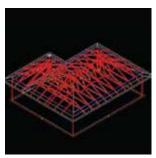
Load — Displacement of C75 1.0mm BMT 25 Degree Heel with Short Stiffener and 9 off #12-14x20 Teks Compression Test 1

### **COMPUTER DESIGNED**

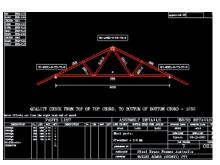
**LYSAGHT® SMARTRUSS®** truss designs are supported by **LYSAGHT® SUPRACADD®** detailing software which models the geometry, designs the roof trusses and facilitates manufacture by licensed manufacturers. This high-quality, industry leading software enables precise, customised truss designs with all the necessary details for accurate construction. Critically approved by industry professionals, it comes with a full set of cutting edge features, and forms the essential foundation for any successful, world-class building project.



**STEP 1 -** Input Building Layout



**STEP 2 -** Trusses are designed



**STEP 3 -** Engineering Calculation performed

## PRECISION MANUFACTURING



Truss components are manufactured



Bundled together and marketed



Can be fabricated off-site and delivered pre-assembled



Assembled on-site

### **Accredited by the National Association of Testing Authorities (NATA)**

LYSAGHT® Technology operates a NATA-registered structural testing laboratory together with a complete research and development facility.





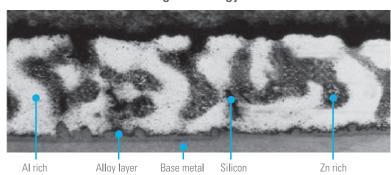


### WHY TRUECORE® STEEL?

### **Key notes:**

- High tensile strength minimum 550 MPa yield strength
- Structural load optimisation
  - Requires less building material
  - Reduces overall structural and lifting costs
- Corrosion-resistant coating technology
  - Highly resistant to corrosion and deformation
  - Unique in Malaysia
- Minimum service life of 50 years
- Certified to AS 1397 and MS 1196 by Sirim
- Conforms to JKR specifications BMT≤1.2mm (G550; AZ150)
- Certified to SIRIM ECO-LABEL Eco Friendly Coated Steel

### Corrosion-resistant coating technology



- Coatings are applied to steel to prevent rust
- TRUECORE® steel coated with a 55% aluminium, 43.5% zinc, 1.5% silicon alloy coating
- AZ150 coating class (50µm coating thickness both surface)
- Outperforms normal zinc galvanised steel by up to 4 times
- Total both sides according to AS 1397

### Advantages of TRUECORE® steel vs. Timber Trusses

- Material consistency
- Fire resistant
- Unaffected by termites
- Longevity
- Less installation errors
- Unaffected by warping

# Advantages of TRUECORE® steel vs. Mild Steel Trusses

- Light and easy handling
- Welding not required and screw fastened
- Speed of construction
- Does not require painting
- Corrosion resistant
- No material wastage

# Advantages of TRUECORE® steel vs. Galvanised Iron

- 4X stronger protection against corrosion
- Superior cut edge protection
- Better tight bend performance





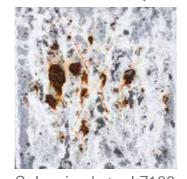


# WARRANTY\* OF 50 YEARS AGAINST PERFORATION BY CORROSION

### TRUECORE® STEEL CORROSION PERFORMANCE

	Galvanised steel 300g/m²	TRUECORE® steel 150g/m²
Cleveland Condensing Humidity Test	4032 hours to red rust	14000 hours to rust free
Salt Spray Chamber	295 hours to 5% red rust	2260 hours to 5% red rust

### **After 500 hours (Salt Spray Test)**





Galvanised steel Z180

TRUECORE® steel

# HOW TO IDENTIFY GENUINE TRUECORE® STEEL

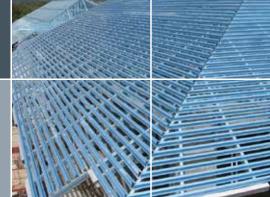
Pay attention to the TRUECORE® steel branding text on every coil, which is your assurance of BlueScope commitment to quality.

Branding text:





Note: All the product images used in this brochure are for reference purposes only and does not reflect the actual configuration of the product. Kindly note that the product images are indicative and for illustration purposes only. Lysaght reserves the right to make any change to product images without prior notice. For accurate and up-to-date information, seek advice from Lysaght representative.



<sup>\*</sup> Warranty terms and conditions apply.



# **Trusted Partner for Building Systems**

#### NS BLUESCOPE LYSAGHT MALAYSIA SDN BHD

NO 6, PERSIARAN KEMAJUAN, SEKSYEN 16, 40200 SHAH ALAM, SELANGOR DARUL EHSAN, MALAYSIA.

#### **NORTHERN**

1-2-9, KRYSTAL POINT CORPORATE PARK, JALAN TUN DR. AWANG, LEBUH BUKIT KECIL 6, 11900 SUNGAI NIBONG, PENANG, MALAYSIA.

### SOUTHERN

BMS MALL - BLOCK A #02-08, NO. 6, JALAN KENCANA MAS 2/1, KAWASAN PERINDUSTRIAN TEBRAU III, 81100 JOHOR BAHRU, JOHOR DARUL TAKZIM, MALAYSIA.

TEL: +607-355 1576/7/8 FAX: +607-355 1579

#### **NS BLUESCOPE LYSAGHT SABAH SDN BHD**

LORONG KURMA OFF JALAN KOLOMBONG, 88450 KOTA KINABALU, SABAH, MALAYSIA.

TEL: +6088-445 161 FAX: +6088-421 178

### NS BLUESCOPE LYSAGHT SARAWAK SDN BHD KUCHING

LOT 610, SECTION 66, PENDING INDUSTRIAL AREA, JALAN MERBAU, 93450 KUCHING, SARAWAK, MALAYSIA.

TEL: +6082-333 621 FAX: +6082-483 486

### **BINTULU**

LOT 974, BLOCK 26 KLD, KIDURONG LIGHT INDUSTRIAL ESTATE, 97000 BINTULU, SARAWAK, MALAYSIA.

TEL: +6086-251 736 FAX: +6086-252 881

### **NS BLUESCOPE LYSAGHT BRUNEI SDN BHD**

INDUSTRIAL COMPLEX, BERIBI PHASE 1, 6KM, JALAN GADONG, BANDAR SERI BEGAWAN BE 1118, BRUNEI DARUSSALAM.

TEL: +673-244 7155 FAX: +673-244 7154

### **NS BLUESCOPE LYSAGHT SINGAPORE PTE LTD**

18 BENOI SECTOR, JURONG TOWN, SINGAPORE 629851

TEL: +65-6264 1577 FAX: +65-6265 0951

www.lysaghtasean.com lysaghtmalaysia@bluescope.com Customer Hotline:

1700-81-8688



Mar 2020