



# Harmonious Coretrades Pte Ltd



**HC+ Tableform System  
(BCA Band2)**

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# About us

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Harmonious Coretrades, founded in 2010, now specialises in the rental of shoring and Scaffold systems.

Harmonious Coretrades offers a comprehensive range of shoring and scaffolding systems:

1. Harmonious Coretrades HC+ Tableform System  
(BCA Band 2/14 points),
2. HC+ Shoring System,
3. HC+ Safe Working System.


## Company certifications



# One System

## Limitless Applications

HC+ system is a modular scaffolding system for construction and industrial applications. HC+ system is built with fewer main components which lead to a significant reduction of commissioning quantities. Regardless of the requirements, up to 80% of the material is reusable for different applications. The structural components is hot dipped galvanized. All the components are tested by Singapore Test Services.



30 %  
Lighter per m<sup>3</sup>

30 %  
Less individual  
components

50 %  
Faster to  
assemble

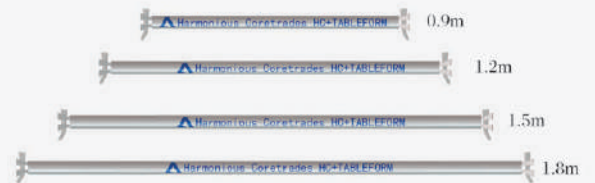
## Standards

Standards are available from 0.25m to 2.5m. Octagonal plates are welded to the tubes in 0.5m increments.



## Ledgers

Ledgers are available in lengths of 0.9m, 1.2m, 1.5m and 1.8m. Ledgers are connected to the vertical Standards using the casting end with the captive wedge. This connection is extremely strong and prevents the possibility of loose components.



## Diagonal bracing

Diagonal bracing are available in various ledger lengths.

Diagonal bracing attach to the octagonal plate using the same integrated wedge connection as the Ledgers.



## Base Jacks and Top Jacks

As the first and last components of the HC+system to be assembled, the base jacks and top jacks ensure the correct transfer of loads to the ground and come equipped with a spindle for height adjustment.

## Standards

Standards ensure the transfer of vertical loads. They have octagonal plates welded every 0.5m where ledgers and diagonal bracings can be installed.



## Ledgers

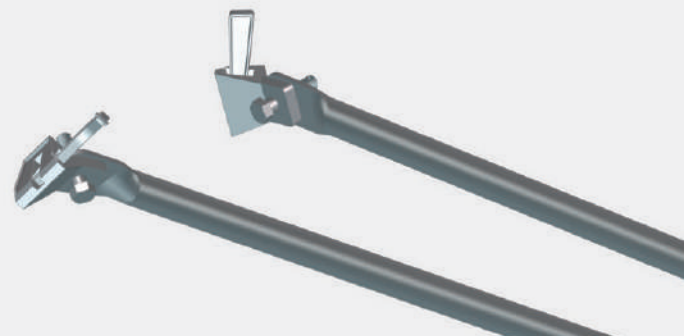
Ledgers connect to octagonal plate using a cast ledger and wedge.

Ledgers are structural elements supporting platforms or act as guardrail edge protection. Ledgers are available in lengths 0.9m, 1.2m, 1.5m and 1.8m.



## Diagonal bracings

Diagonal bracings connect to the octagonal plate using a swiveling cast end and wedge, and provide rigidity to the scaffold. Available in every ledger length.



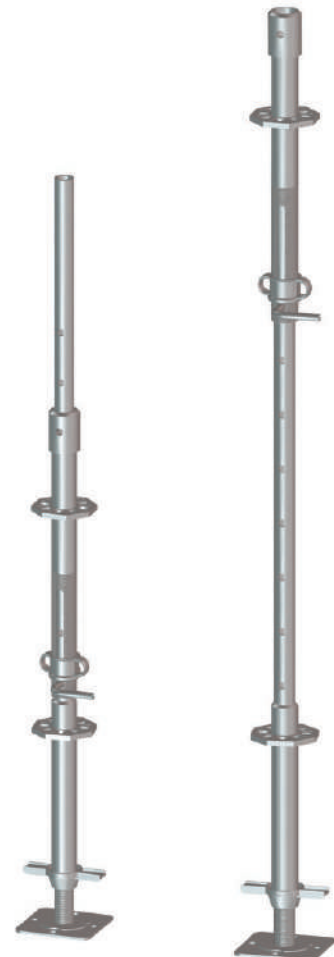
## Side/Console Brackets

Bracket enable the decking floor to be extended.



## Adjustable Standard

The adjustable standard is used in the HC+ Tableform, especially for the slab. The adjustable height could make the slab tableform be shifted underneath the beam.



Pre-defined dimensions of components with fixed distance between octagonal plates and a simple wedge lock mechanism.

## Intuitive connections

Slide the ledger end onto the octagonal plate and drop the wedge into the hole.

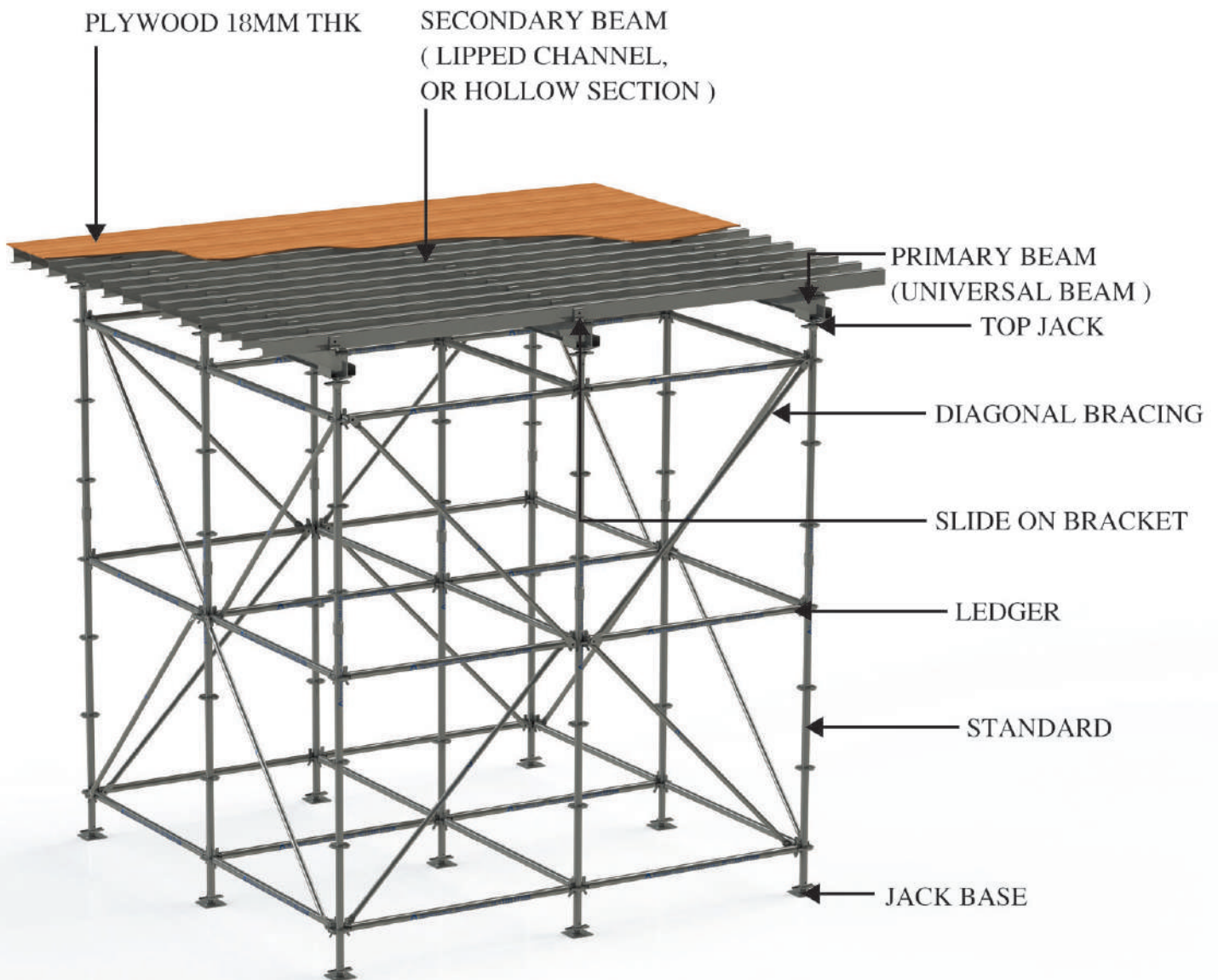


## Simple lock

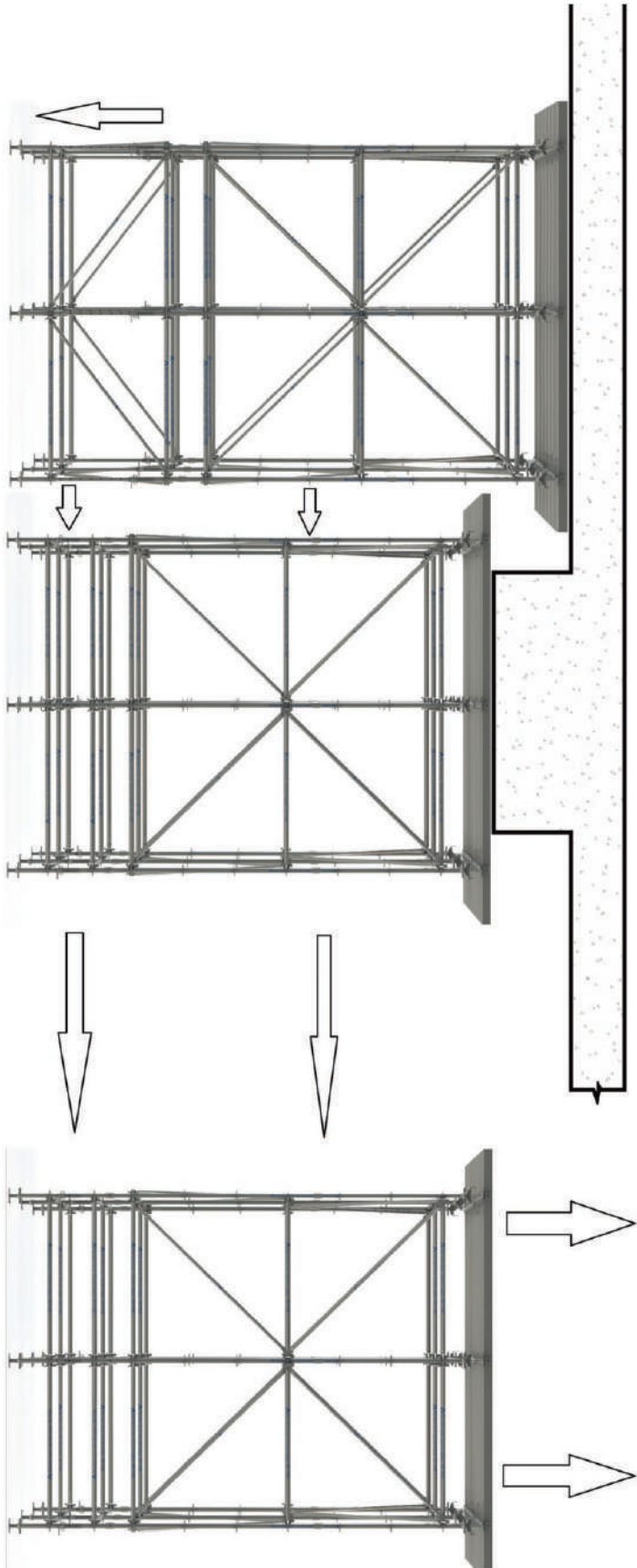
One blow of the hammer and the connection can be made rigid and capable for bearing/transferring loads.



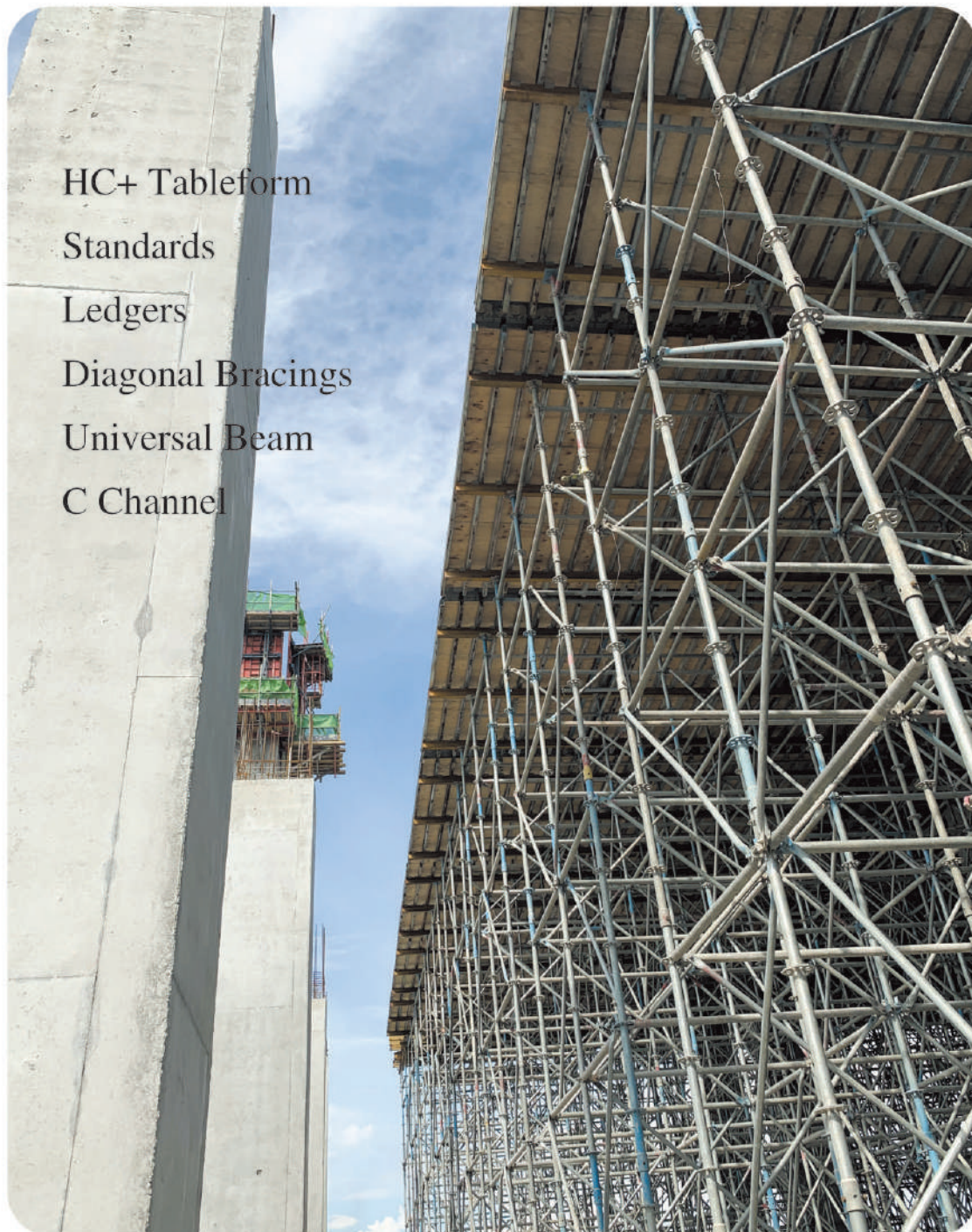
# Harmonious Coretrades HC+ Tableform System



**Harmonious Coretrades HC+ Tableform System  
(With adjustable standard)**



## Project: Mesmed Warehouse at 3 Tuas Ave 2



## Project: 5 Storey Warehouse at 12 Penjuru Lane

### HC+ Tableform

Standards

Ledgers

Diagonal Bracings

Universal Beam

C Channel

Safety Barricade



## Transferring Method (By Loading Platform or Slab Opening)



## Project: Thomson–East Coastal Line–T202

### HC+ Shoring

Standards

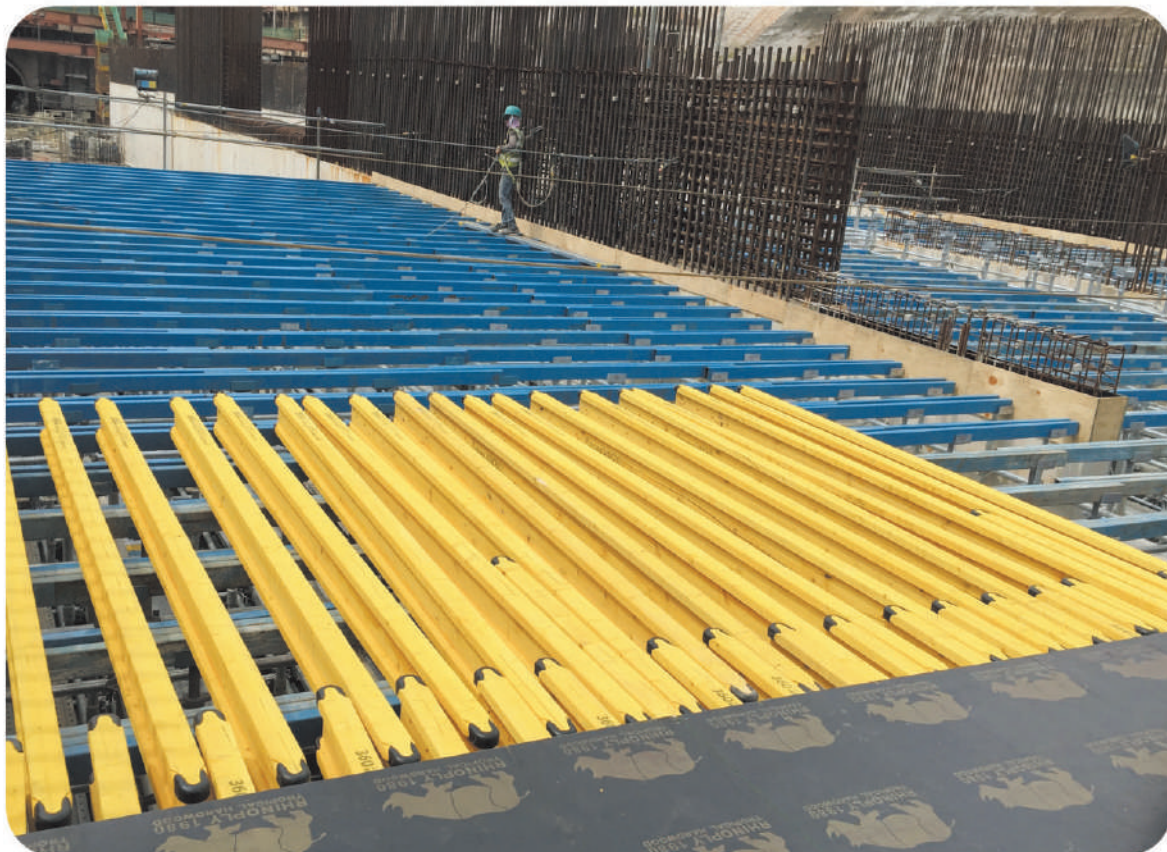
Ledgers

Diagonal Bracings

Hollow Section

Timber Beam

Metal Decking



## Project: 7 Storey Precast Warehouse at 5 Tuas Ave 5



### HC+ Shoring

Standards

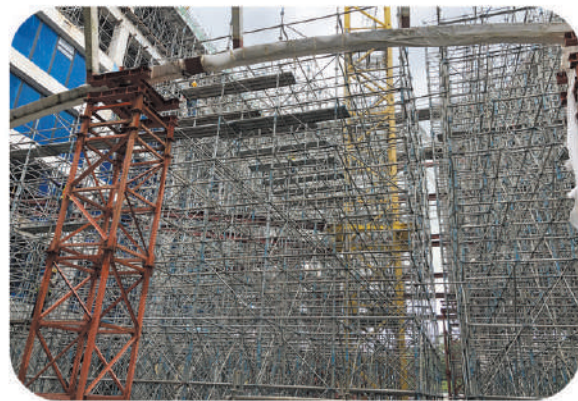
Ledgers

Diagonal Bracings

Hollow Section

Metal Decking

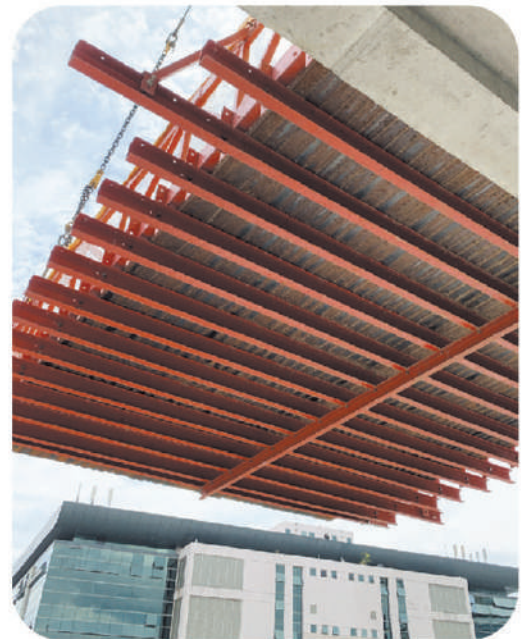
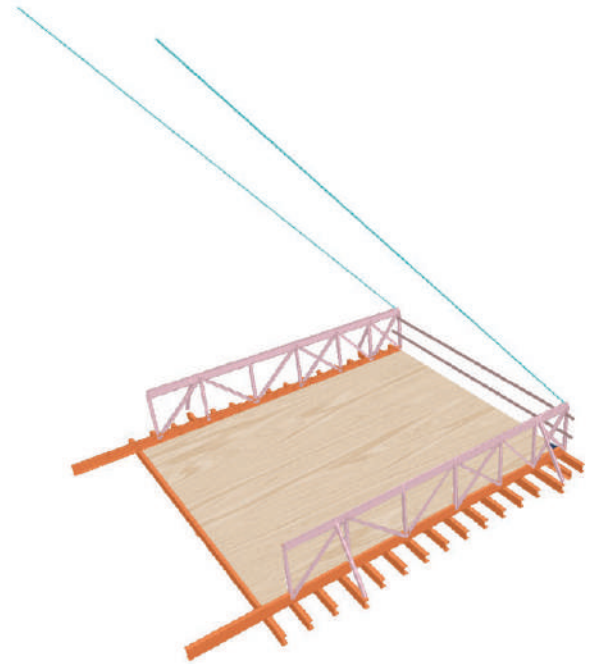
## Project: 32m Height Working Platform at Cleantech Loop



## Project: Bombardier Hangar at Seletar Aerospace Park

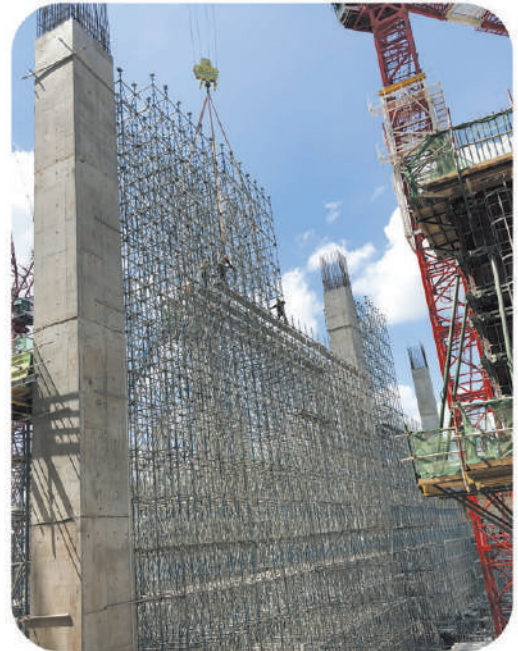


## Project: Razer S.E.A Headquarter at One-North





Logistics Centre at 47 Jalan Buroh



Logistics Centre at 47 Jalan Buroh



Logistics Centre at 47 Jalan Buroh



Food processing Factory at 218 Pandan Loop



Logistic centre at 47 Jalan Buroh



Logistics Centre at 2 Tanjong Penjuru



Razer S.E.A Headquarter at One North



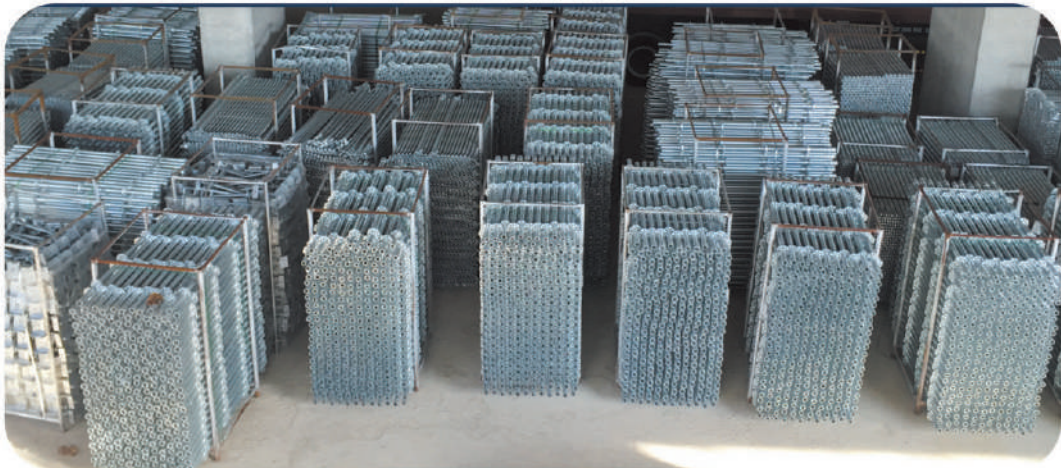
Hoisting Tableform at Razer S.E.A Headquarter



Hotel at Science Park



Logistics Centre at Tuas South Ave 16



# Material Tests By Singapore Test Services Pte Ltd



Report No: 02327-0222-00642-MEME/3  
Date of Report: 25 February 2022

Results of Testing: (The reported result(s) below relate only to the as-received sample(s))

Table 1: Load Test Results

Sample Reference	Galvanized Vertical Standard – L1500mm		
	Sample 1	Sample 2	Sample 3
Length of Tube (mm)	1500	1500	1500
Tube Outside Diameter (mm)	48.80	48.82	48.71
Thickness of Tube (mm)	3.32	3.23	3.26
Proof loaded at 45.3kN (With Reference to CP14, 1998, Table 5a) test for one minute	Satisfactory – No distortion and defects observed		
Maximum Failure Load (kN)	199.25	183.57	199.10
Results of Observation	Vertical Tube buckled (Figure 3)		

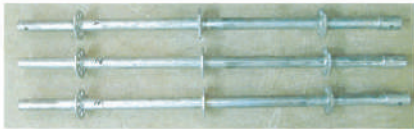


Figure 1: Received Samples



Report No: 02327-0222-00642-MEME/1  
Date of Report: 24 February 2022

Results of Testing: (The reported result(s) below relate only to the as-received sample(s))

Table 1: Tensile Test Results

Sample Reference	SS220: Part 2: 2009 Requirements	Galvanized Scaffold Ledger – L1.2m Ledger
Specimen Width mm	-	20.12
Specimen Thickness mm	< 2.0	2.87
Cross Sectional Area mm <sup>2</sup>	-	53.72
Yield Load N	-	22419
Yield Strength N/mm <sup>2</sup>	315 min.	417
Maximum Load N	-	26307
Tensile Strength N/mm <sup>2</sup>	-	490
Elongation after Fracture (Lo=5.65xA) %	-	27
Position of Fracture	-	Broke Within Gauge Length

Remark: Test results indicated that the submitted Galvanized Scaffold Ledger met the acceptance criteria for mechanical properties of steel tube



Figure 1: Tensile Test Location



Report No: 15819-1221-04633-MEME/1  
Date of Report: 01 December 2021

Results of Testing: (The reported result(s) below relate only to the as-received sample(s))

Table 1: Load Test Results

Sample No.	Adjustable Jack Base – L800mm			
	Proof Load Test (59.8kN)			Max. Compressive Load (kN)
	Distortion	Other Defects	Adjusting Nut Functioning	
J1	Nil	Nil	Satisfactory	207.72
J2	Nil	Nil	Satisfactory	235.82
Specification	Shall not show any sign of distortion and the function shall not be impaired			-

Remarks: Testing results indicated that the submitted Adjustable Jack Base met the acceptance criteria for load test.

Nominal Size: OD37.70mm x T5.91mm x L800mm



Figure 1: Received Jack Base



Figure 2: After Test

Nominal Size: W14.0mm x L14.0mm x T5.76mm



Report No: 15819-1221-04633-MEME/2  
Date of Report: 01 December 2021

Results of Testing: (The reported result(s) below relate only to the as-received sample(s))

Nominal Size: OD37.70mm x T5.91mm x L800mm



Figure 1: Received Jack Base (J3)

Load Direction



Figure 2: Test Setup

Nominal Size: W14.0mm x L14.0mm x T5.76mm



Figure 3: After Test

Steel Plate Tapered to a slope of 1:10 (9° Angle)



Figure 4: After Test



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