



Delivering Excellence, Building Solutions.

STRUCTURAL
DECKING

TH FLOOR DECK 75 & 51





HQ Selangor

Founded in 1983, Thung Hing established itself as a fore runner of high quality steel products manufacturing, particularly building materials for the construction industry. Our ISO 9001 certified factories in Rawang Industrial area, Malaysia, manufactures products to meet the demands of our clients from all over the world.

From the humble beginnings of fixing residential roof gutters 20 years ago, passion and hard work have equipped Mr. Lee with skills and expertise in the metal works trade, not to mention earning him a steady customer base who seek the craftsmanship and superior quality that became synonymous with the Thung Hing name. Having grown the company industrially and strategically to date, Mr Lee's ambition and innovations continue to drive new product categories, value-added services and international quality assurance. This commitment to every customer will continue to write the Thung Hing legacy.



Kedah



Kelantan

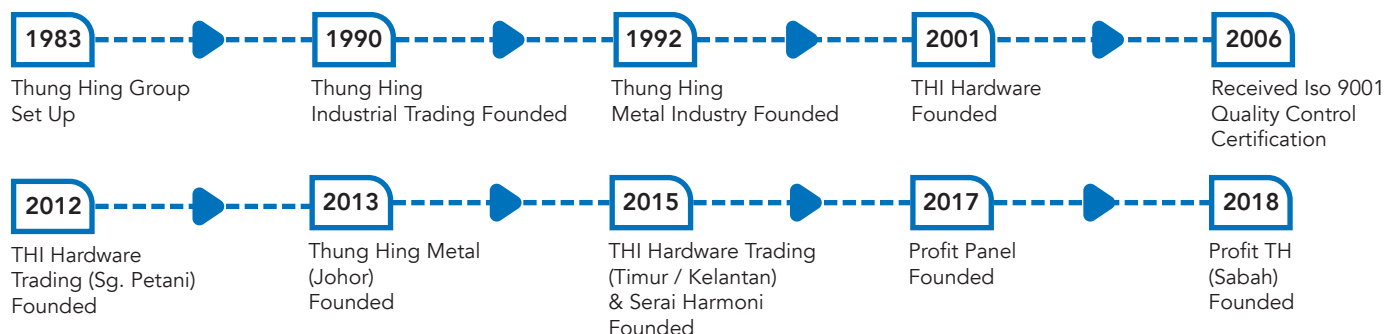


Johor



Sabah

Our Journey



THUNG HING'S PRODUCTS REVOLVES IN 4 CORE PRODUCT SEGMENTS

With the rapid growth of Thung Hing's market share in the 4 core segment areas, we constantly reinvest in our steel fabrication plants nationwide to increase productivity efficiency, product quality enhancement; as well as new product research and development.



TH FLOOR DECK 75



TH Floor Deck 75 is an efficient, versatile and robust structural decking system for concrete, masonry or steel frame construction. It is a highly regarded formwork product offering cost efficiency and speed of construction.

TH Floor Deck 75 has an effective longitudinal reinforcement and the top of the ribs has been embossed top bring about greater mechanical bonding between the steel sheet and concrete.

- Excellent spanning capacities for greater strength and less deflection
- Works as composite slab saving on concrete and reinforcement costs
- Linear elastic analysis of continuous composite slabs
- Economical for fire
- Stronger than similar decks due to the patented corner embossments



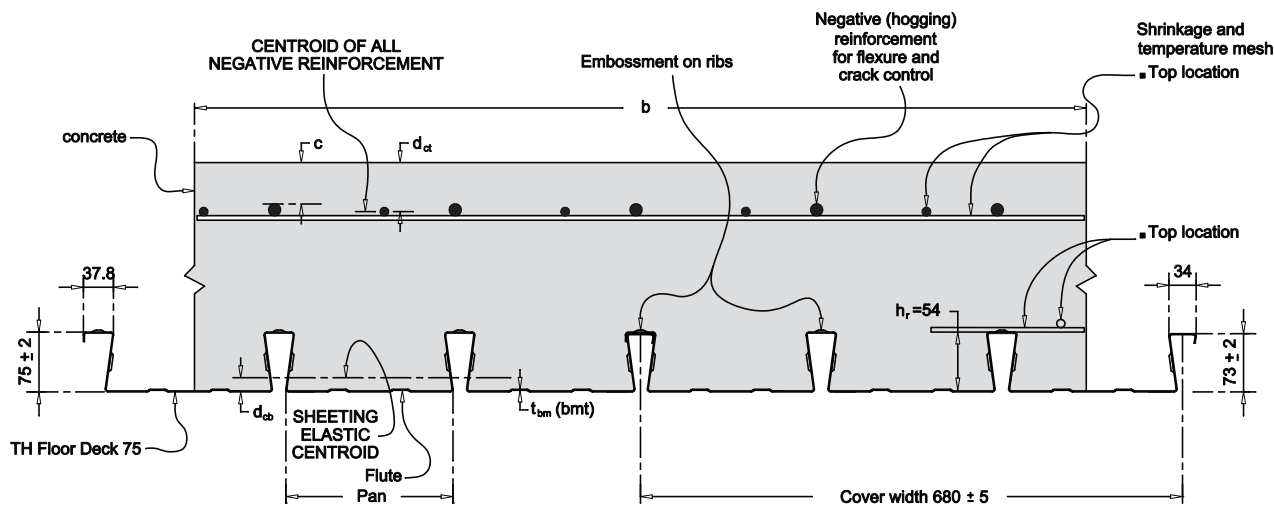
TECHNICAL SPECIFICATIONS

TH Floor Deck 75 is rolled-formed from hot dipped, zinc coated, high tensile steel, in base metal thickness (BMT) of 0.75, 1.0, 1.2mm.

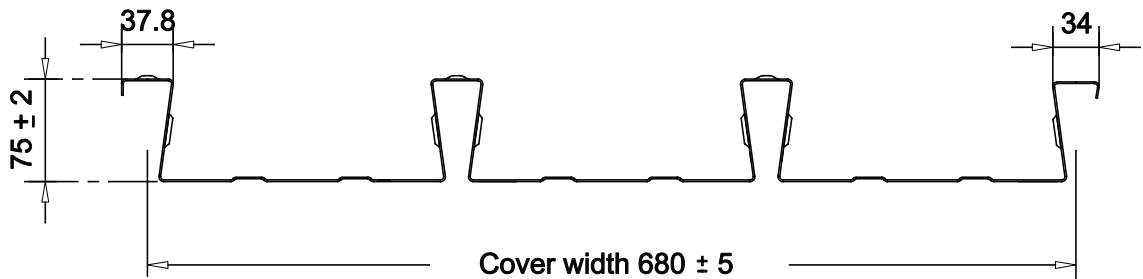
- For 0.75 and 1.0mm the steel grade is G550
- For 1.2mm the steel grade is G500

The Coating is Z275 (275g/m² minimum coating mass) on both sides.

PROFILE DIMENSION & REINFORCEMENT



PROFILE DIMENSION



TH FLOOR DECK 75 SECTION PROPERTIES

Thickness BMT (mm)	Steel Grade (Mpa)	Zinc Coating Class +	Cross-sectional Area A_{sh} mm ² / m	Second Moment of Area I mm ⁴ / m	Y-Neutral Axis I mm ⁴ / m	Z Modulus Elastic mm ³ / m	Weight Kg / m ²
0.75	550	Z275 / AZ150	1401	1122747	52.8	21264	11.07
1.0	550	Z275 / AZ150	1868	1496997	52.8	28352	14.60
1.2	500	Z275 / AZ150	2243	1796396	52.8	34023	17.40

SAMPLES OF SPECIFICATION

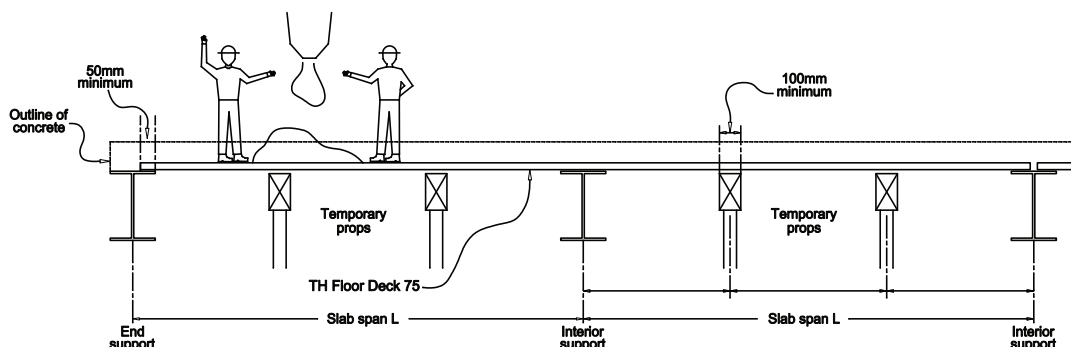
TH Floor Deck 75 1.0mm Base Metal Thickness (BMT) structural decking formwork & composite slab dovetail re-entrant profile produce from cold rolled steel G550Mpa tesile strength with zinc coating of Z275

FORMWORK DESIGN

TH Flood Deck 75 formwork shall be designed in accordance to BS 5950. Design of profile sheeting as permanent formwork.

TH Flood Deck 75 acting as structural formwork, provided the following conditions are satisfied

- The support lines extend across the full width of the sheeting and have a minimum bearing of 50mm at the ends of the sheets when rest on steel or concrete and 70mm when rest on other material such as masonry wall.
- The sheets continue within each slab span length without any overlaps or intermediate splicing or jointing longitudinally.
- The ratio of the longer slab span (L_l/L_s) of any two adjacent spans does not exceed 1.2 (i.e. $L_l/L_s \leq 1.2$).
- The supports are effectively rigid such that their vertical deflections during the construction phase can be ignored in design.
- Maximum construction imposed load is 1.5 kPa, or 4.5/Span kPa for slab spans less than 3m. Construction imposed load can be applied on the TH Flood Deck 75 formwork or recently formed slabs.
- Maximum imposed storage load on the formwork is 4 kPa. This load shall not be applied on recently formed slabs.
- Imposed construction loads shall not be applied to areas supporting storage loads and vice versa.



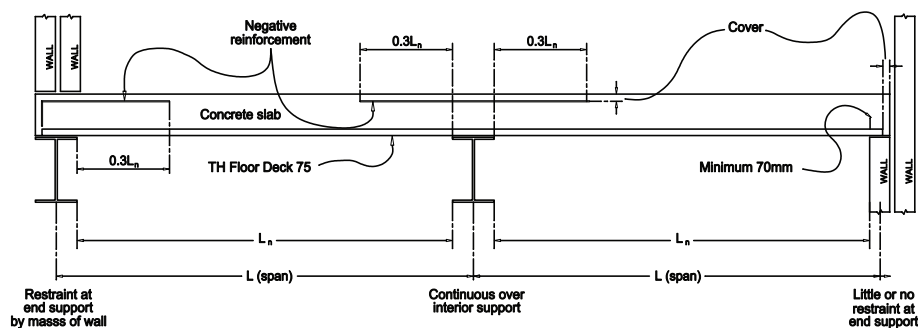
COMPOSITE SLAB DESIGN

TH Flood Deck 75 composite slabs be designed in accordance to BS 5950.

The design concept is based on "k" and "m" method. Data about shearbond capacity have been obtained from full-scale tests and supplementary smallscale slip-block tests. The tables provide with solutions for steel frame or masonry wall types of construction.

Our design tables and software can be used to design composite slabs with TH Flood Deck 75, provided the following conditions are satisfied:

- It is a common practice to design continuous slabs as a series of single spans. Minimum nominal reinforcement at intermediate supports shall be specified in this case in accordance to BS5950. It shall be noted that nominal reinforcement will not prevent formation of wide cracks over supports. Increased slab thickness may be required in many instances when continuous slabs are designed as series of simply supported spans.
- The ratio of longer slab span (L_l) to the shorter slab span (L_s) of any two adjacent spans does not exceed 1.2, that is $L_l/L_s \leq 1.2$.
- The bending moments at the supports are only caused by the action of vertical loads applied to the slab.



DESIGN FOR FIRE

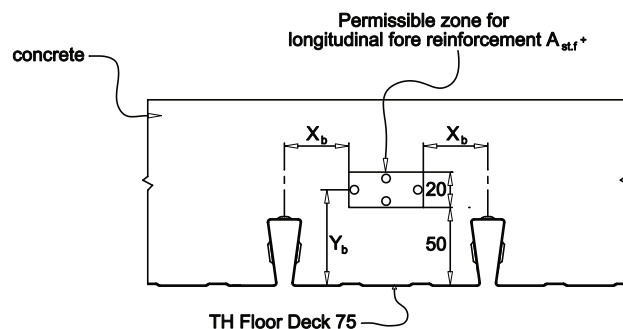
TH Flood Deck 75 composite slabs be designed for the fire conditions in accordance to BS 5950, BS 476-20 and BS 476-21.

Reduction factors are applied to allow for the adverse effect of elevated temperatures on the mechanical properties of concrete and steel. Values of these reduction factors have been derived from fire tests conducted at Victoria University of Technology and extensive finite element analysis of TH Flood Deck 75 composite slabs.

Reduced shear bond capacity is also considered for elevated temperatures.

Our tables may be used to detail TH Flood Deck 75 composite slabs when the soffit is exposed to fire provided the following conditions are satisfied:

- The composite slab acts as a one-way element spanning in the direction of the sheeting ribs for both room temperature and fire conditions.
- The composite slab has been initially designed and detailed for room temperature conditions in accordance to this manual.
- The fire design load is essentially uniformly distributed and static in nature.
- Adequate detailing of slab jointing, edges, slab holes and cavities (for penetrating, embedded or encased services) to provide the appropriate fire resistance period. Alternatively the local provision of suitable protection (such as fire spray material) will be necessary.
- The fire periods are 30, 60, 90, 120, 180 or 240min.
- $X_b \geq 30\text{mm}$



TH FLOOR DECK 75 SPAN TABLES

TH Floor Deck 75 symmetrical lapped ribs and embossments features allows it to span longer than other types of re-entrant profile.

The span table below shows the maximum un-propped span for TH Floor Deck 75 installed in single or continuous span

FORMWORK DESIGN

FORMWORK SPAN 0.75MM BMT

No Props (Single Span)								
Slab Thickness (mm)	125	130	140	150	175	200	225	250
Maximum Span (m)	3.25	3.20	3.15	3.10	2.90	2.80	2.65	2.55
1 Prop (Continuous Span)								
Slab Thickness (mm)	125	130	140	150	175	200	225	250
Maximum Span (m)	3.60	3.50	3.40	3.30	3.10	2.90	2.80	2.70

FORMWORK SPAN 1.0MM BMT

No Props (Single Span)								
Slab Thickness (mm)	125	130	140	150	175	200	225	250
Maximum Span (m)	3.60	3.55	3.45	3.35	3.20	3.05	2.90	2.80
1 Prop (Continuous Span)								
Slab Thickness (mm)	125	130	140	150	175	200	225	250
Maximum Span (m)	4.10	4.10	4.00	3.90	3.60	3.40	3.20	3.10

FORMWORK SPAN 1.2MM BMT

No Props (Single Span)								
Slab Thickness (mm)	125	130	140	150	175	200	225	250
Maximum Span (m)	3.75	3.70	3.65	3.60	3.40	3.25	3.10	3.00
1 Prop (Continuous Span)								
Slab Thickness (mm)	125	130	140	150	175	200	225	250
Maximum Span (m)	4.50	4.40	4.30	4.20	3.90	3.70	3.50	3.40

COMPOSITE SLAB DESIGN

FORMWORK SPAN 0.75MM BMT

No Props (Single Span)								
Slab Thickness (mm)	110	125	130	140	150	175	200	225
Maximum Span (m)	3.40	3.30	3.20	3.15	3.10	2.90	2.75	2.65
Mesh	A7	A7	A7	A7	A7	A7	A7	A7
2 Hrs Fire Rating (Bar in Tough)	T12-400	T12-600	T12-600	T12-600	T12-600	T12-600	T12-600	T12-600
1 Prop (Continuous Span)								
Slab Thickness (mm)	110	125	130	140	150	175	200	225
Maximum Span (m)	3.70	3.60	3.50	3.45	3.40	3.20	3.05	2.95
Mesh	A7	A7	A7	A7	A7	A7	A7	A7
2 Hrs Fire Rating (Bar in Tough)	T12-400	T12-400	T12-400	T12-400	T12-600	T12-600	T12-600	T12-600
Mesh Over Support	B8	B7	B7	B7	B7	B7	B7	B7
Shear Stud for 8.4m Span	1 / trough	1 / trough	1 / trough	1 / trough	1 / trough	1 / trough	1 / trough	1 / trough

FORMWORK SPAN 1.0MM BMT

No Props (Single Span)								
Slab Thickness (mm)	110	125	130	140	150	175	200	225
Maximum Span (m)	3.70	3.60	3.55	3.45	3.40	3.2	3.05	2.90
Mesh	A7	A7	A7	A7	A7	A7	A7	A7
2 Hrs Fire Rating (Bar in Tough)	T12-400	T12-400	T12-400	T12-400	T12-600	T12-600	T12-600	T12-600
1 Prop (Continuous Span)								
Slab Thickness (mm)	110	125	130	140	150	175	200	225
Maximum Span (m)	4.10	4.00	3.95	3.85	3.80	3.6	3.45	3.3
Mesh	A7	A7	A7	A7	A7	A7	A7	A7
2 Hrs Fire Rating (Bar in Tough)	T12-400	T12-400	T12-400	T12-400	T12-600	T12-600	T12-600	T12-600
Mesh Over Support	B8	B8	B8	B8	B7	B7	B7	B7
Shear Stud for 8.4m Span	1 / trough	1 / trough	1 / trough	1 / trough	1 / trough	1 / trough	1 / trough	1 / trough

FORMWORK SPAN 1.2MM BMT

No Props (Single Span)								
Slab Thickness (mm)	110	125	130	140	150	175	200	225
Maximum Span (m)	3.90	3.80	3.75	3.65	3.50	3.40	3.2	3.05
Mesh	A7	A7	A7	A7	A7	A7	A7	A7
2 Hrs Fire Rating (Bar in Tough)	T12-400	T12-400	T12-400	T12-400	T12-600	T12-600	T12-600	T12-600
1 Prop (Continuous Span)								
Slab Thickness (mm)	110	125	130	140	150	175	200	225
Maximum Span (m)	4.40	4.20	4.15	4.05	4.0	3.8	3.6	3.45
Mesh	A7	A7	A7	A7	A7	A7	A7	A7
2 Hrs Fire Rating (Bar in Tough)	T12-400	T12-400	T12-400	T12-400	T12-600	T12-600	T12-600	T12-600
Mesh Over Support	B8	B8	B8	B8	B7	B7	B7	B7
Shear Stud for 8.4m Span	1 / trough	1 / trough	1 / trough	1 / trough	1 / trough	1 / trough	1 / trough	1 / trough

SPAN TABLE NOTES

- Density of wet concrete is assumed at 2400 kg/m3
 - Formwork deflections limit: L/180
 - Minimum bearing on beam shall be 100mm
- Maximum allowable construction load shall be 1.5 kN/m²
 - Indoor condition for creep and shrinkage
 - Thung Hing Industrial recommends a gauge of 1.00mm BMT for expose soffit in propped applications to avoid creasing of steel decking

INSTALLATION GUIDELINES

Storage and Handling

TH Floor Deck 75 sheets are delivered to site or specified storage area, in strapped bundles. If not required for immediate use, bundles should be neatly stacked clear of the ground with a fall for drainage and protected by waterproof covers. Do not allow rain or condensation to be trapped between sheets. To minimize damage to the sheets, break open bundles only when installation is due to commence.

When lifting, it is recommended that appropriate lifting equipments are used. Unprotected chain slings can damage the bundle during lifting.



Propping

It is common practice to specify unpropped **TH Floor Deck 75** formwork, however, depending on the span of a **TH Floor Deck 75** slab, temporary propping may be needed between the slab supports to prevent excessive deflections or collapse of the formwork.

TH Floor Deck 75 formwork is normally place directly on prepared propping. Props must stay in place during the laying of **TH Floor Deck 75** formwork, the placement of the concrete, and until the concrete has reached the strenght of 20 MPa.

Propping generally consists of substantial timber or steel bearers supported by vertical props. The bearers must be continuous across the full width of **TH Floor Deck 75** formwork.

Where the underside of **TH Floor Deck 75** is to remain exposed as a feature, a wide ply form strip attached to the bearers will minimize marking. strips of 300mm wide are commonly used.



Laying

TH Floor Deck 75 should be accurately aligned, side laps fully lapped and the gap between abutting ends kept to a minimum.

Provision should be made so that all panels have full end and intermediate bearing support on the building framework of a minimum of 50mm unless other stated on the structure drawings. If supporting on a brick or masonry wall, provide a separating strip such as a malthoid.

TH Floor Deck 75 must be continuous over all intermediate temporary supports without intermediate splicing or jointing. Sheetting shall only terminate at ends into a premanent support.



Fasteners and Location

TH Floor Deck 75 must be positively fixed to the supporting structure, in order to avoid movement and excessive deflection during pouring of concrete.

When fixing to a steelwork support structure, shot fired pins or self drilling/tapping fasteners should be used. Provide 1 fastener in each pan at every support. Place the fixings in the flat areas of the pans adjacent to the ribs or between the flutes.

Fixing panels to masonry supports may not be necessary if concrete is placed immediately after panels are laid. If fixing is required to prevent movement due to wind or for safety purpose during placement of concrete, the panels should be secured to the temporary timber bearers by nailing.



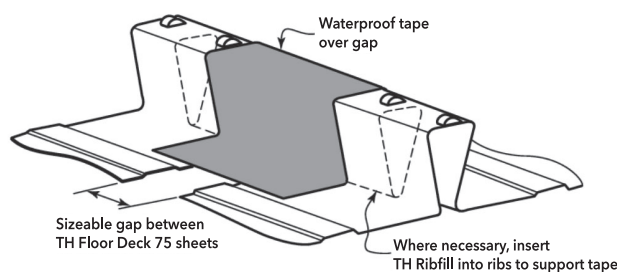
FIXING AT END OF SHEETS



FIXING AT INTERMEDIATE SLAB SUPPORT
OVER WHICH THE SHEETING IS CONTINUOUS

Sealing

Seepage of water or fine concrete slurry can be minimised by following common construction practices. Generally gaps are sealed with waterproof tape or by sandwiching contraction joint material between the abutting ends of **TH Floor Deck 75** sheet



Reinforcement

Place all reinforcement in strict accordance with the structure engineer's drawing and specification.



Concrete Placement

The concrete is placed between construction joints in a continuous operation so that new concrete is placed against plastic concrete to produce a monolithic mass. If the pouring has to be discontinued for any more than approximately 1 hour, depending on the temperature, a construction joint may be required.

Start pouring close to 1 end and spread concrete uniformly, preferably over 2 or more spans. it is good practice to avoid excessive heaping of concrete and heavy load concentrations. When concrete is transported by wheel barrows, the use of planks or boards is recommended.

During pouring, the concrete should be thoroughly compacted. worked around ribs and reinforcement, and into corners of the edge forms by using a vibrating compactor. Ensure that the reinforcement remains correctly positioned so that the specified minimum concrete cover is achieved.



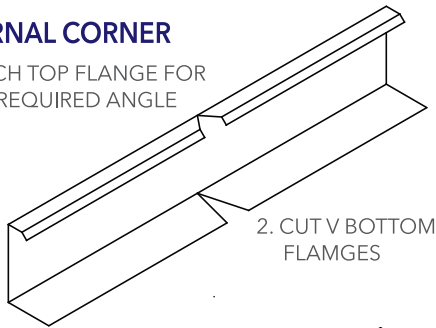
ACCESSORIES

Edge Form is a simple C-shaped section that simplifies the installation of most **TH Floor Deck 75** slabs. It is easily fastened to the **TH Floor Deck 75** sheeting, neatly retaining the concrete and providing a smooth top edge for quick and accurate screeding. We make it to suit any slab thickness.

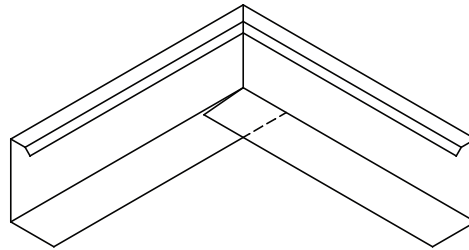
Edge form is easily spliced and bent to form internal and external corners of any angle and must be fitted and fully fastened as the sheet are installed. There are various methods of forming corners and splices.

EXTERNAL CORNER

1. NOTCH TOP FLANGE FOR THE REQUIRED ANGLE

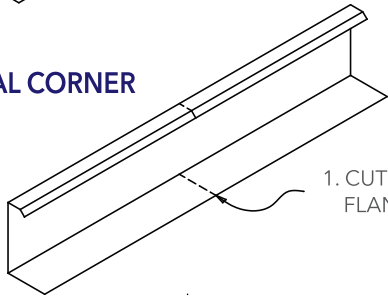


2. CUT V BOTTOM FLANGES



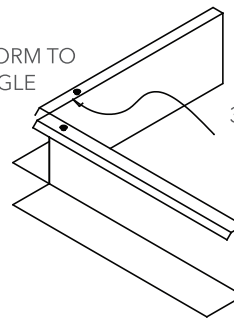
3. BEND CORNER EDGE FORM TO THE REQUIRED ANGLE, OVERLAPPING BOTTOM FLANGES.

INTERNAL CORNER



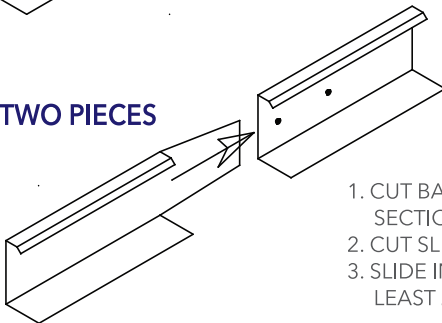
1. CUT TOP AND BOTTOM FLANGES SQUARE

2. BEND EDGE FORM TO REQUIRED ANGLE



3. FASTEN TOP FLANGE EDGE SIDE OF CORNER TO TH FD 75 RIB 100mm MAXIMUM FROM CORNER

SPLICING TWO PIECES

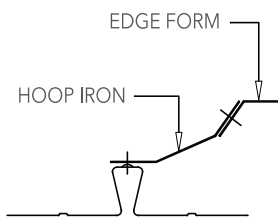


1. CUT BACK TOP AND BOTTOM FLANGES OF ONE EDGE FORM SECTION APPROXIMATELY 200mm

2. CUT SLIGHT TAPER ON WEB

3. SLIDE INSIDE ADJOINING EDGE FORM AND FASTEN WEB WITH AT LEAST 2 SCREWS

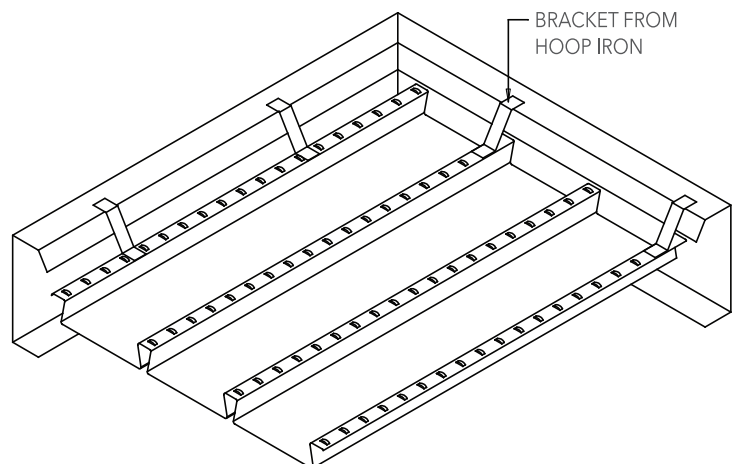
FASTENING BOTTOM FLANGE OF FORM



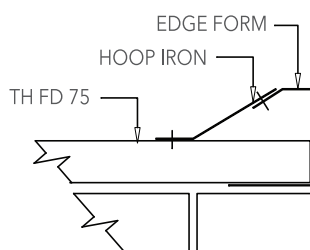
FASTENING TOP FLANGE OF FORM

EDGE FORM

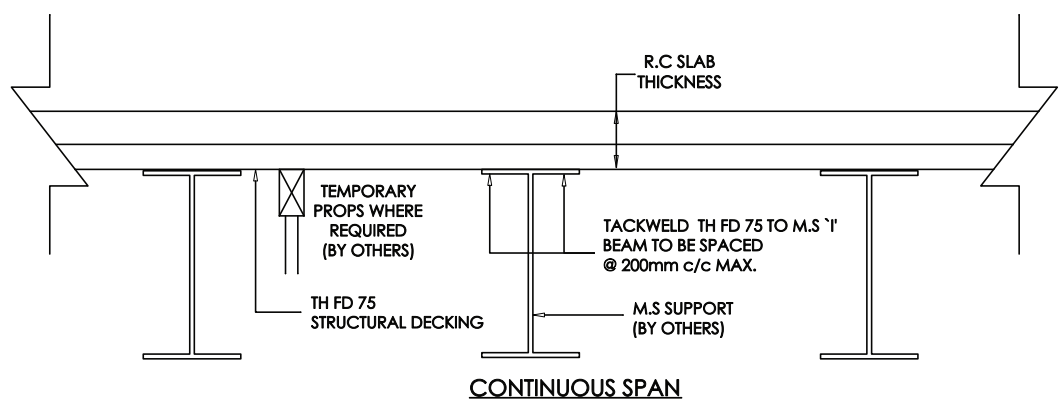
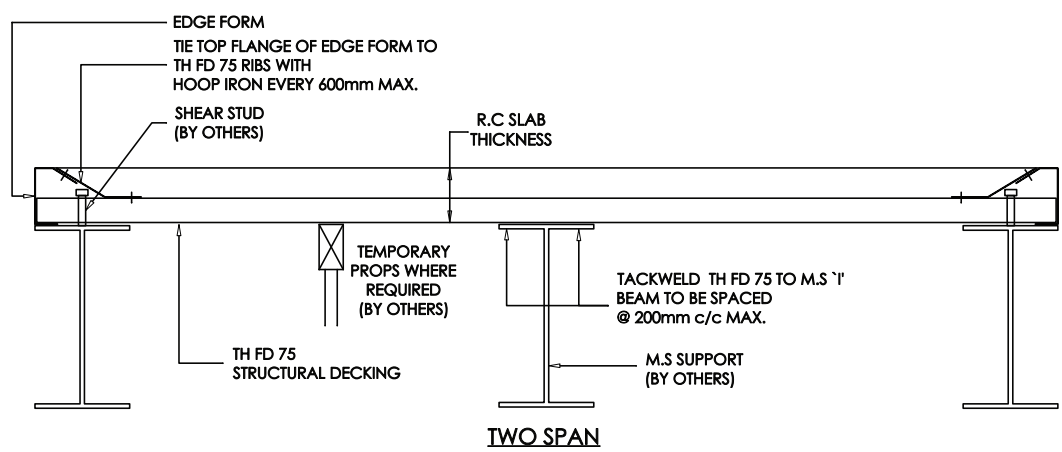
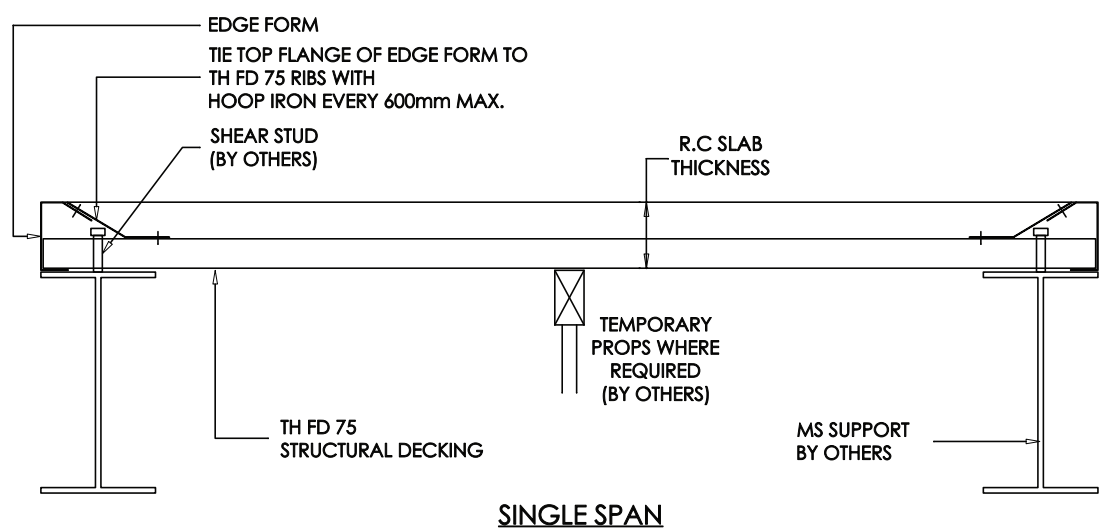
A GALVANISED SECTION THAT CREATES PERMANENT FORMWORK AT THE SLAB EDGE-CUT MITRED AND SCREWED ON SITE. STOCK SLAB DAPTHS 100, 125, 150MM OTHER SPECIAL ORDER STOCK LENGTH 6100MM



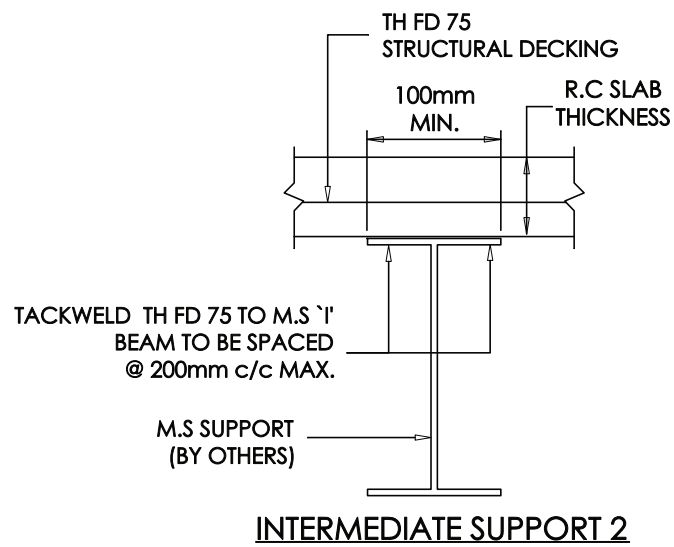
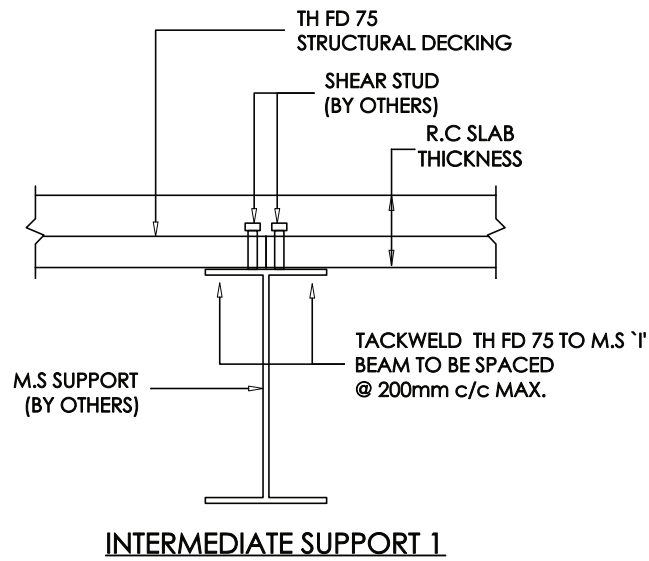
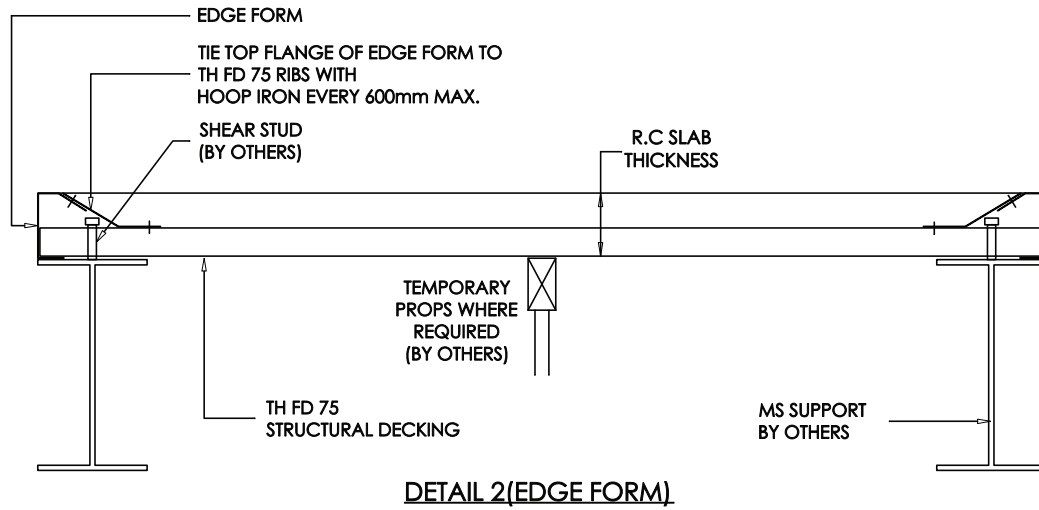
TIE TOP FLANGE OF EDGE FORM, TO TH FD 75 RIBS, WITH HOOP IRON, EVERY 600MM MAXIMUM



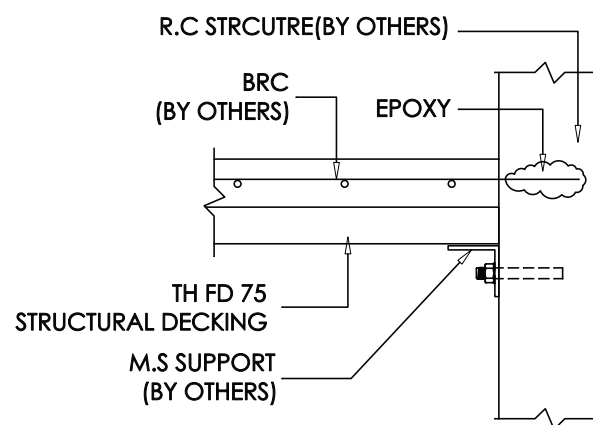
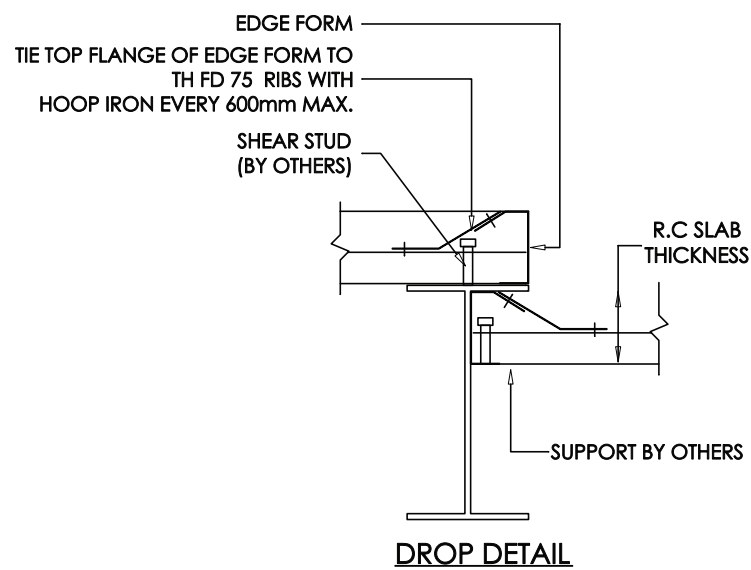
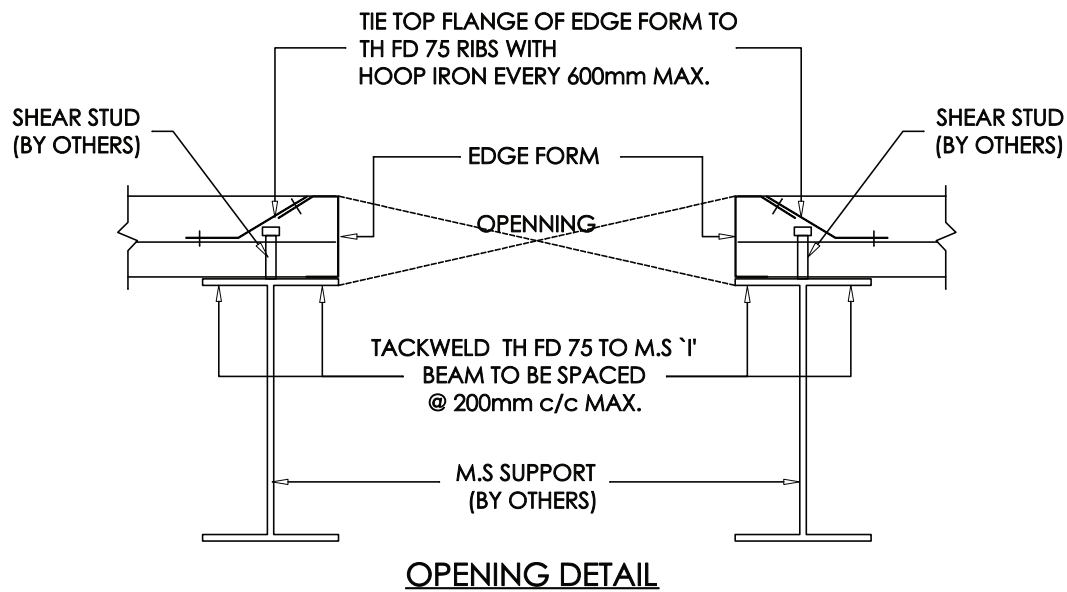
CONSTRUCTION DETAIL



CONSTRUCTION DETAIL



CONSTRUCTION DETAIL



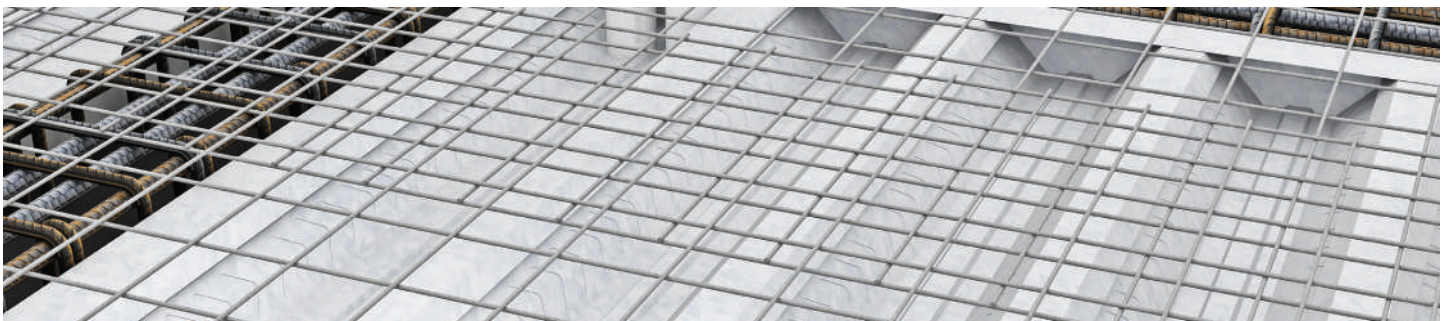
TH FLOOR DECK 51



TH Floor Deck 51, is a purpose designed trapezoidal composite flooring profile and is the most advance composite decking in the region, It incorporates the specific floor decking required by designers, developers, engineers and builders resulting in a revolutionary geometrical profile dimensions.

TH Floor Deck 51 should be kept dry during storage before use. They should be stacked clear of the ground with timber sleepers and covered to prevent bundles from water penetration. If bundles become wet during transportation or storage, the deck plates must be separated and wiped dry with clean cloth as quickly as possible.

When lifting the deck plates during loading and unloading or when lifting onto the floor frame structure, care must be taken to prevent the bundles or loose pieces from dropping to the ground or banging against the building.



Quicker Installation

No temporary supports are required under most conditions.

Proven Construction Economy

TH Floor Deck 51 is a fast to construct, lightweight, and provides a safe working platform so that the building process can continue without delay.

Reduced Slab Depth and Concrete Usage

The Slab dept required is minimized by the profile design. Concrete usage is further reduced by the profile shape. Reduced slab depth and concrete volumes result in lower concrete weight on the structure and foundations, and saving on the total cost of the building structure.

- Simplified process
- Increase construction speed
- Time saving on site
- No premature formwork removal and better floor quality
- Do not need formwork support. Consecutive floor level can be carried out immediately
- Reduce wooden materials stacking on job site
- Better job site safety
- Concrete volume saving

SIRIM QAS International Sdn. Bhd.
No. 1, Persiaran Datar Menara, Section 3, P.O. Box 7936,
47700 Subang Jaya, Selangor Darul Ehsan, Malaysia
Tel: 03-55430838
Fax: 03-55434088
www.sirim-qas.com.my

TEST REPORT

REPORT NO : 2015CB00360 PAGE : 1 OF 3

This Test Report refers only to samples submitted by the applicant to SIRIM QAS International Sdn. Bhd. and tested by SIRIM QAS International Sdn. Bhd. This Test Report shall not be reproduced, copied or in full and shall not be used for any purpose by any means or form (including but not limited to advertising purposes) without written approval from the Managing Director, SIRIM QAS International Sdn. Bhd. Please refer to clause of Page 1 for Conditions Relating to the Use of Test Report.

Applicant : THUNG HING INDUSTRIAL TRADING SDN. BHD.
Lot 1553, Jalan Kampung Monda Tab.
Kawasan Perindustrian Sungai Choh,
Rawang 48000,
Selangor Darul Ehsan.

Manufacturer : THUNG HING INDUSTRIAL TRADING SDN. BHD.

Product : TH Floor Deck

Reference Standard / Method of test : Company's Specification
1) Dimensions
2) Tensile Test

Description of sample : One sample of TH Floor Deck was received for testing
Brand : Thung Hing

Date Received of Complete Application : 16th February 2015

Job No./Ref. No. : J20151430565-SGAS/CDST/RECMBUS6

Description of test results : The test results for the submitted test samples are described in Page 2 and Page 3 of this test report.

Issued date : 7 Mar 2015

Approved Signatory :
JAZAM MOHAMAD
Senior Testing Executive

YUSRI RAJA NOR SIRA RAJA ABD. HANANI
Head
Civil & Construction Section
Testing Services Department

REPORT NO : 2015CB00362 PAGE : 2 OF 3

This Test Report refers only to samples submitted by the applicant to SIRIM QAS International Sdn. Bhd. and tested by SIRIM QAS International Sdn. Bhd. This Test Report shall not be reproduced, copied or in full and shall not be used for any purpose by any means or form (including but not limited to advertising purposes) without written approval from the Managing Director, SIRIM QAS International Sdn. Bhd. Please refer to clause of Page 1 for Conditions Relating to the Use of Test Report.

TEST RESULTS : DIMENSIONS

SAMPLE REFERENCE	THICKNESS	DIMENSIONS (mm)				
		A	B	C	D	E
TH FLOOR DECK	0.98	998.50	9.20	104.43	139.61	49.25




Diagram Of TH Floor Deck Sample

(The remainder of this page is intentionally left blank)

7 Mar 2015

REPORT NO : 2015CB00362 PAGE : 3 OF 3

This Test Report refers only to samples submitted by the applicant to SIRIM QAS International Sdn. Bhd. and tested by SIRIM QAS International Sdn. Bhd. This Test Report shall not be reproduced, copied or in full and shall not be used for any purpose by any means or form (including but not limited to advertising purposes) without written approval from the Managing Director, SIRIM QAS International Sdn. Bhd. Please refer to clause of Page 1 for Conditions Relating to the Use of Test Report.

TEST RESULTS : TENSILE TEST

SAMPLE REFERENCE	TH FLOOR DECK
THICKNESS, a (mm)	0.98
YIELD STRENGTH, R_{eH} (N/mm ²)	500
TENSILE STRENGTH, R_m (N/mm ²)	640
ELONGATION, A (%)	13.0

(The remainder of this page is intentionally left blank)

7 Mar 2015



Certified to : BS EN 612 : 2008
Certification No : PT059101



Certified to : ISO 9001: 2008
Cert. No : AR 4673

TECHNICAL SPECIFICATIONS

Material Specifications

High tensile steel, with minimum yield strength of 550Mpa and a minimum zinc coating mass of 270g/m²

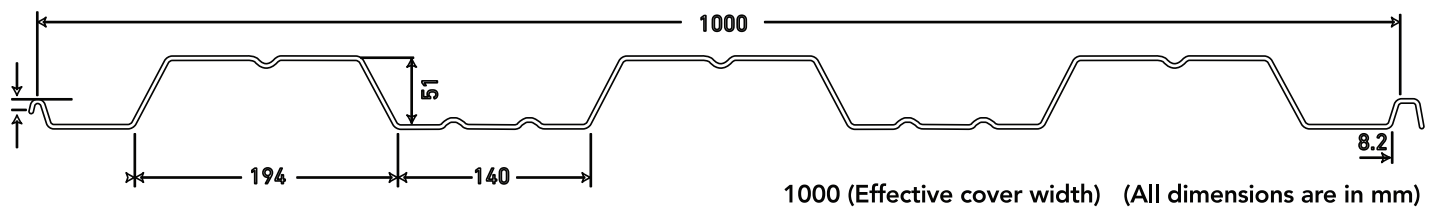
Tolerances

TH Floor Deck 51 are produced within the following tolerances:

Length: ± 10mm | Cover: ± 10mm | Thickness: ± 0.02mm

Embossments

Raised pigeon tail pattern embossments on each face of the web provides the mechanical connection between the steel and the hardened concrete.

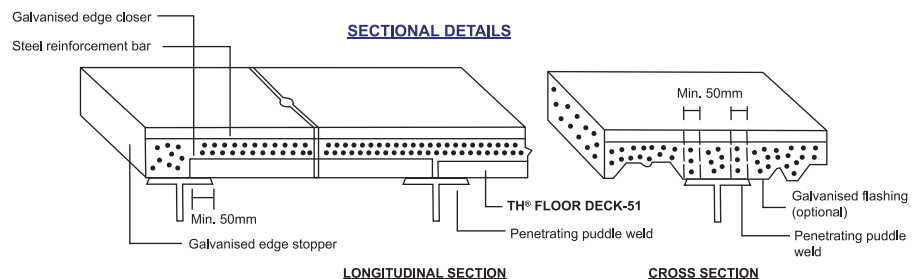


Dimension & Properties							
Section Properties (Per Metre Width)							
Type SDP - 51	Base Material Thickness (mm)	Weight Covered Area (kg/m ²)	Neutral Axis (mm)	Effective Second Moment Of Area 1 mm ⁴	Effective Compression Section Modulus Zc mm ³	Effective Section Modulus Tension	Ultimate Moment Resistance KNM
THFD 51 - 08	0.75	8.59	18.63	332196	10392	18219	4.35
THFD 51 - 10	1.0	10.56	19.84	448229	14618	23178	6.12
THFD 51 - 12	1.2	12.54	20.87	570672	19324	28155	8.09
THFD 51 - 15	1.5	15.50	22.14	761702	27101	35603	11.34

Note: Density of Concrete is taken as:

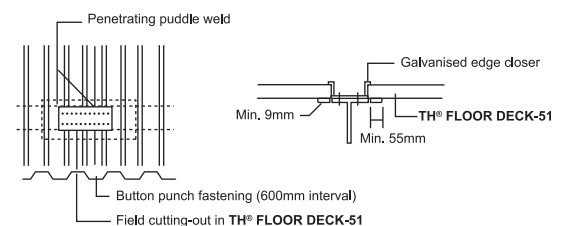
- Normal weight (wet) 2400kg/m³
- Normal weight (dry) 2350kg/m³
- Light weight (wet) 1900kg/m³
- Light weight (dry) 1800kg/m³

Deck and mesh weight not included in the figure

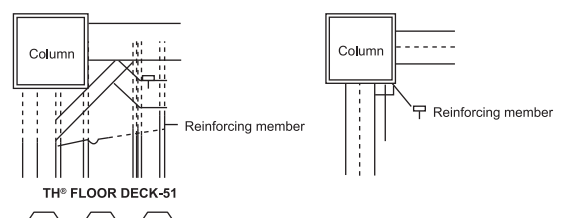


Volume and Weight Table					
Slab Depth	Concrete Volume	Weight (kN/m ²)		Weight (kN/m ²)	
		Normal Concrete		Light Weight Concrete	
mm	m ³ /m ²	Wet	Dry	Wet	Dry
100	0.079	1.86	1.82	1.47	1.39
100	0.089	2.09	2.05	1.66	1.57
115	0.094	2.21	2.17	1.75	1.66
120	0.099	2.33	2.28	1.85	1.75
130	0.109	2.57	2.51	2.03	1.92
140	0.119	2.80	2.74	2.22	2.10
145	0.124	2.92	2.86	2.31	2.19
150	0.129	3.04	2.97	2.40	2.28
180	0.159	3.74	3.67	2.96	2.81
200	0.179	4.21	4.13	3.34	3.16
240	0.219	5.16	5.05	4.08	3.87

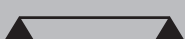
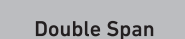

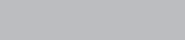
BEAM JOINT DETAILS



AROUND COLUMN DETAILS



NORMAL WEIGHT CONCRETE

Maximum Span (m)											
			TH® Floor Deck Thickness (TCT)								
			0.75 mm			1.0 mm			1.2 mm		
			Slab Depth			Total Applied Load (kN/m²)					
3.5kN/m²	5kN/m²	10kN/m²				3.5kN/m²	5kN/m²	10kN/m²	3.5kN/m²	5kN/m²	10kN/m²
mm											
No Temporary Props	 Single Span	100	2.2	2.2	2.2	2.4	2.4	2.4	2.8	2.7	2.6
		120	2.1	2.1	2.1	2.3	2.3	2.3	2.7	2.6	2.5
		130	2.1	2.1	2.1	2.3	2.3	2.3	2.6	2.5	2.4
		150	2.0	2.0	2.0	2.2	2.2	2.2	2.5	2.5	2.4
		200	1.9	1.9	1.9	2.1	2.1	2.1	2.4	2.2	2.2
		240	1.8	1.8	1.8	2.0	2.0	2.0	2.2	2.1	2.1
	 Double Span	100	2.2	2.2	2.2	2.7	2.7	2.7	3.1	3.0	2.8
		120	2.1	2.1	2.1	2.6	2.6	2.6	2.9	2.8	2.7
		130	2.1	2.1	2.1	2.5	2.5	2.5	2.8	2.8	2.7
		150	2.0	2.0	2.0	2.4	2.4	2.4	2.7	2.7	2.6
		200	1.9	1.9	1.9	2.2	2.2	2.2	2.5	2.5	2.4
		240	1.8	1.8	1.8	2.1	2.1	2.1	2.4	2.3	2.3
1 Line Temporary Props	 Single Span	100	3.0	2.8	2.3	3.3	3.1	2.6	3.5	3.3	2.7
		120	2.9	2.7	2.3	3.2	3.0	2.5	3.4	3.2	2.7
		130	2.9	2.7	2.3	3.2	3.0	2.5	3.4	3.2	2.7
		150	2.9	2.7	2.3	3.1	2.9	2.5	3.3	3.1	2.6
		200	2.7	2.5	2.2	3.0	2.8	2.4	3.1	3.0	2.6
		240	2.6	2.5	2.2	2.8	2.7	2.4	3.0	2.9	2.5
	 Double Span	100	3.4	3.1	2.5	3.8	3.4	2.8	4.1	3.6	3.0
		120	3.3	3.0	2.5	3.6	3.3	2.8	4.0	3.6	2.9
		130	3.3	3.0	2.5	3.6	3.2	2.7	3.9	3.5	2.9
		150	3.2	2.9	2.5	3.5	3.2	2.7	3.8	3.5	2.9
		200	3.0	2.8	2.4	3.3	3.0	2.6	3.6	3.3	2.8
		240	2.9	2.7	2.3	3.2	2.9	2.6	3.4	3.2	2.7

Disclaimer : The information on the materials presented herein is provided for informational purposes only. Thung Hing shall not be liable for any loss or damage whatsoever arising from, but not limited to the usage of information provided. Any omission, error, typographical errors and technical inaccuracies relating to the information may be changed or updated without notice.

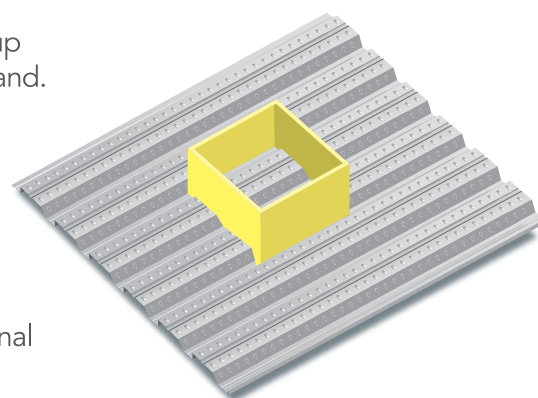
Packing

TH Floor Deck 51 is packed into bundle of up to 15 sheets may weight up to 2 ton depending on sheet lenght. The sheets are secured with metalband.

Floor Openings

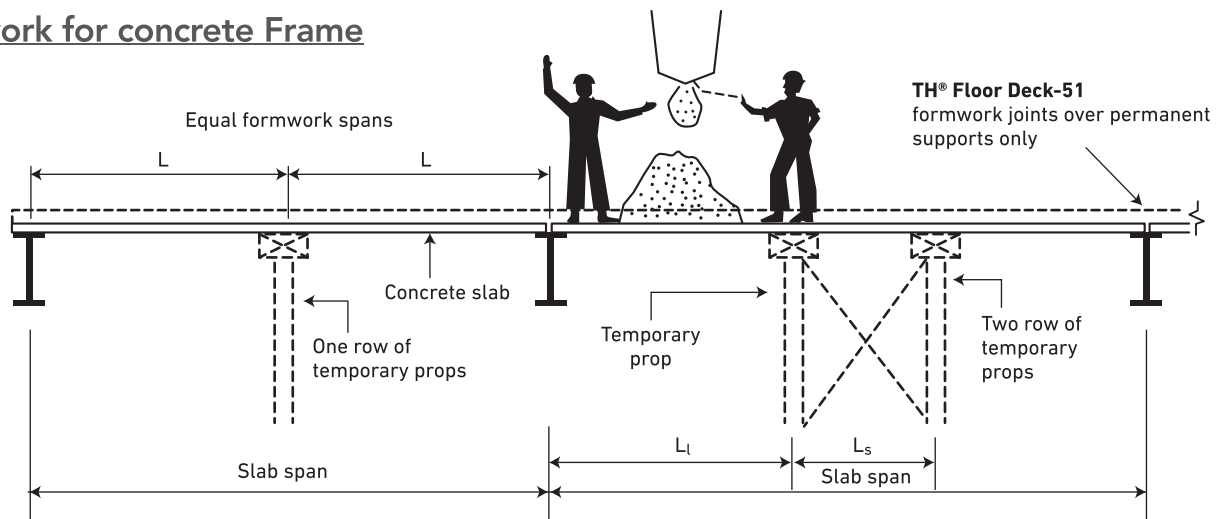
Opening can be accommodated readily i composite slab by boxing up prior to pouring concrete and cutting out the deck after the concrete has cured.

Small opening less than 300mm Square do not normally required additional reinforcement. Openings greater than 300mm Square must be designed with extra reinforcement place around the opening.

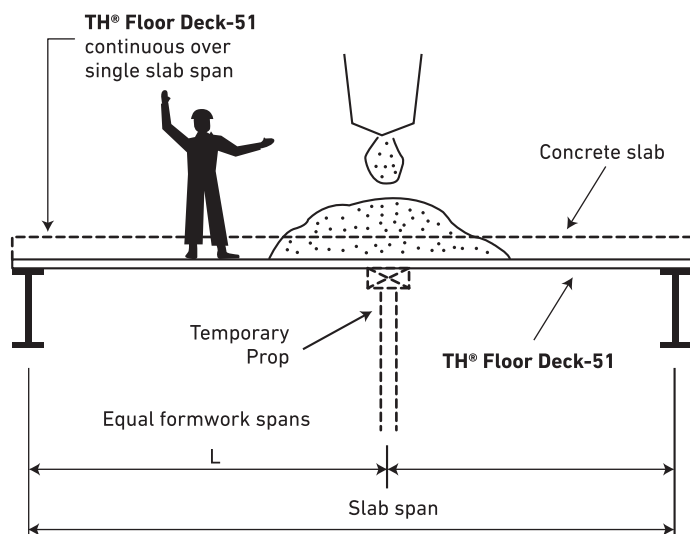


DECKING DESIGN & CONSTRUCTION MANUAL

Formwork for concrete Frame

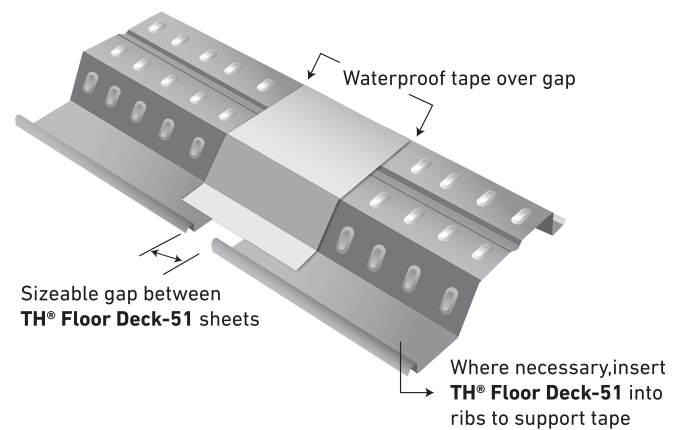


Formwork for steel frame

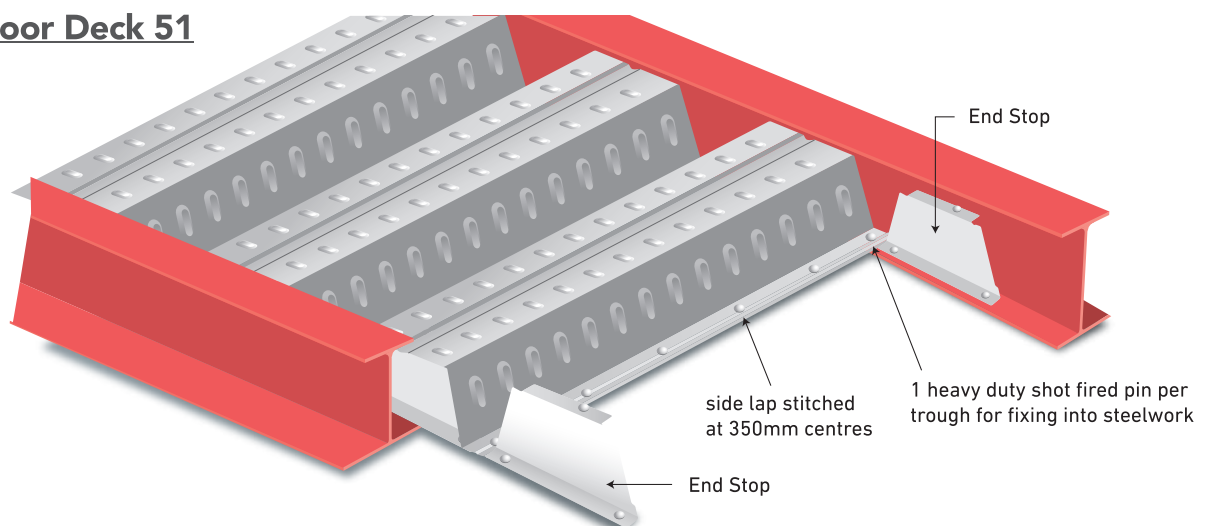


Sealing

Seepage of water or fine concrete slurry can be minimised by following common construction practices. Generally gaps are sealed with waterproof tape by sandwiching contraction joint material between the abutting ends of **TH Floor Deck-51** sheet. If there is a sizeable gap you may have to support the waterproof tape.

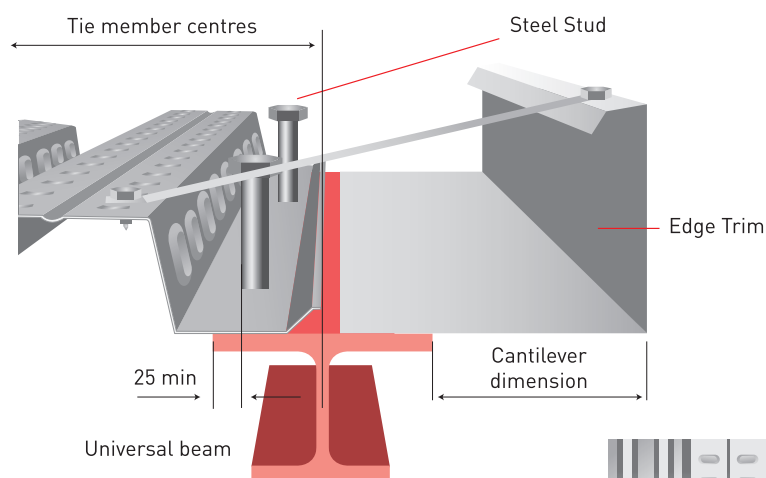


Fixing of TH Floor Deck 51



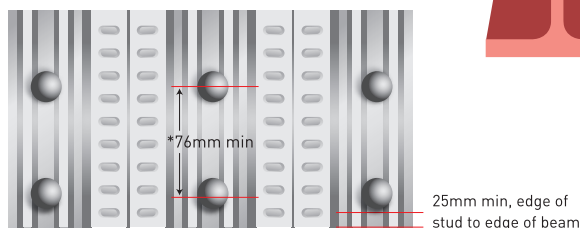
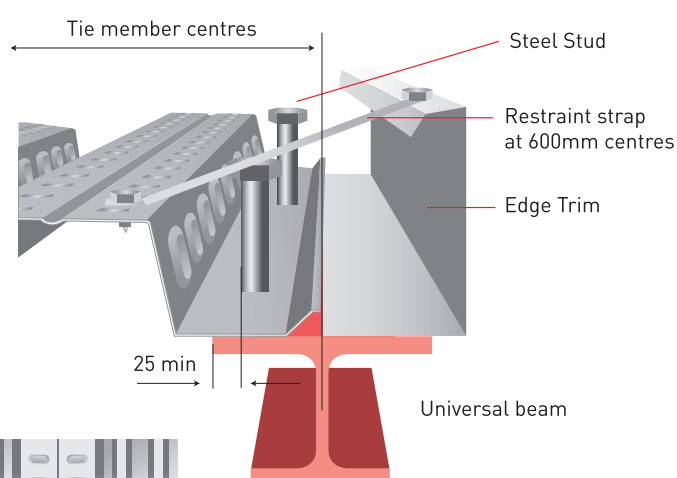
Typical Side Detail Cantilever CONSTRUCTION DETAIL

Typical side detail cantilever

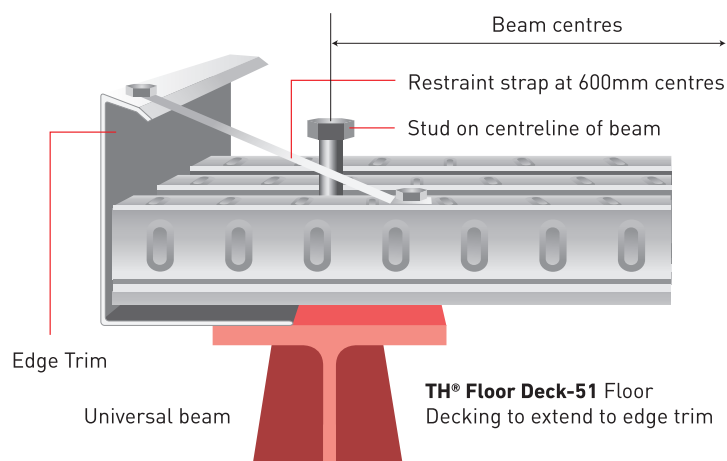


For cantilever over 1500mm, additional reinforcement is required.

Typical side detail

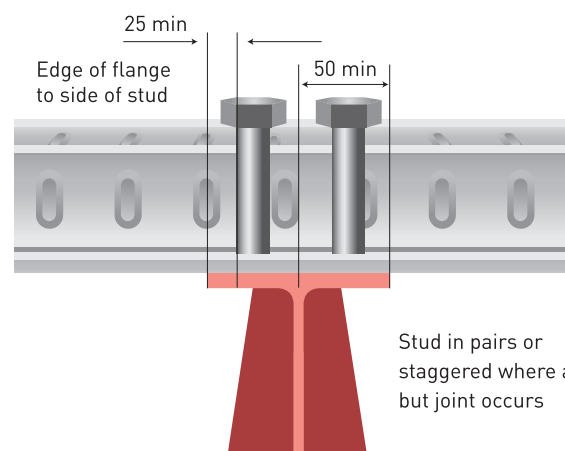


End detail

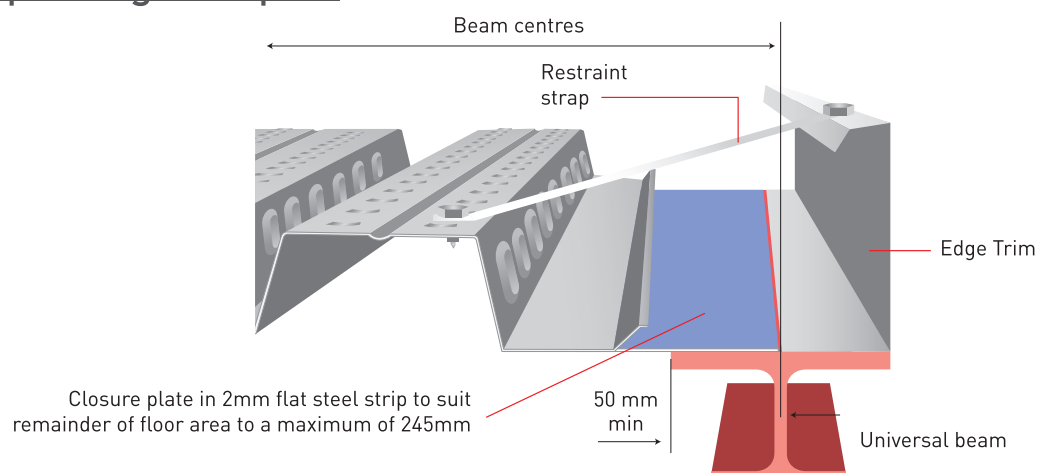


TH® Floor Deck-51 Floor Decking to extend to edge trim

Butt joint



Typical edge with plate



Closure plate in 2mm flat steel strip to suit remainder of floor area to a maximum of 245mm

The formation on the material herein is provided for informational purposes only. Thung Hing shall not be liable for any loss or damage whatsoever arising from, but not limited to the usage of information provided. Any omission, error typographical errors and technical inaccuracies relating to the information may be changed or updated without notice.

CENTRAL REGION

SELANGOR DARUL EHSAN :

Lot P. T. 1353, Jalan Mohd Taib, Kawasan Industri Sg. Choh, 48000 Rawang, Selangor Darul Ehsan, Malaysia

Tel : +603-6099 9999 / 9988 **Fax :** +603-6099 9922 / 9933

NORTHERN REGION

KEDAH DARUL AMAN :

No. E2, Jalan Cendana 4/5, Kaw. Perindustrian Cendana, 08000 Sungai Petani, Kedah Darul Aman, Malaysia.

Tel : +604-430 0321(HL) +604-430 4335 / 4568 **Fax :** +604-430 4393 / 4348 / 4849 **H/P :** +6012-381 9218

PERAK DARUL RIDZUAN :

Lot 111940, Jalan Lahat, 31450 Menglembu, Perak Darul Ridzuan, Malaysia.

Tel : +605-282 1844 **Fax :** +605-2820 844 **H/P :** +6017-360 1218

170, Hala Perusahaan Menglembu 1, Kawasan Prindustrian Menglembu, 31450 Ipoh Perak Darul Ridzuan, Malaysia.

Tel : +605-282 1844 **Fax :** +605-2820 844 **H/P :** +6017-360 1218

SOUTHERN REGION

JOHOR DARUL TAKZIM :

Lot 4452, Pt. Kampung Abdul Rahman, 82200 Benut, Pontian, Johor Darul Takzim, Malaysia.

Tel : +607-690 9926 / 9929 **H/P :** +019-278 8788 **Fax :** +607-690 9928

EAST COAST

KELANTAN DARUL NAIM :

Lot 1493, Kaw. Perindustrian Pengkalan Chepa II, Seksyen 44, Mukim Panchor, Daerah Kemumin, 16100 Kota Bharu, Kelantan Darul Naim, Malaysia.

Tel : +609-774 1127 / 1128 **H/P :** +012-200 6335 **Fax :** +609-774 1130 / 1131

TERENGGANU DARUL IMAN :

17446, Kawasan Perindustrian Wakaf Tapai, 21040 Marang, Terengganu Darul Iman, Malaysia.

Tel : +609-638 1216 **Fax :** +609-638 1219

EAST MALAYSIA

SABAH :

Lot No 11A, Jalan 3 KKIP Timur, Industrial Zone 13, KKIP Telipok, 88460 Kota Kinabalu, Sabah

Tel : +608 840 8919 **H/P :** +6019-267 8817



THUNG HING GROUP

W : www.thunghing.com.my **E** : enquiries@thunghing.com **f** : [Thung Hing group](#) **@** : [thunghing.group](#) **d** : [thunghing.group](#)

The information and illustration contained herein are for guidance only. Care has been taken to ensure all data and information herein is factual and numerical values are accurate at the time of publication. However, any or all technical specification, information and dimensions are nominal and provisional; they are subjected to change and variations in accordance with market conditions at the date of factual supply. No representation is made or to be implied as to the data and information herein; THUNG HING GROUP, and its subsidiary and associate companies shall not be responsible for any errors in or misrepresentation of the information contained in this brochure or its use. THUNG HING GROUP, and its subsidiary and associate companies reserve the right to alter any or all specifications as deemed fit and necessary without prior notice.
Copyright © 2017 THUNG HING GROUP. All Rights Reserved.