

M*Ci* GUARDRAIL

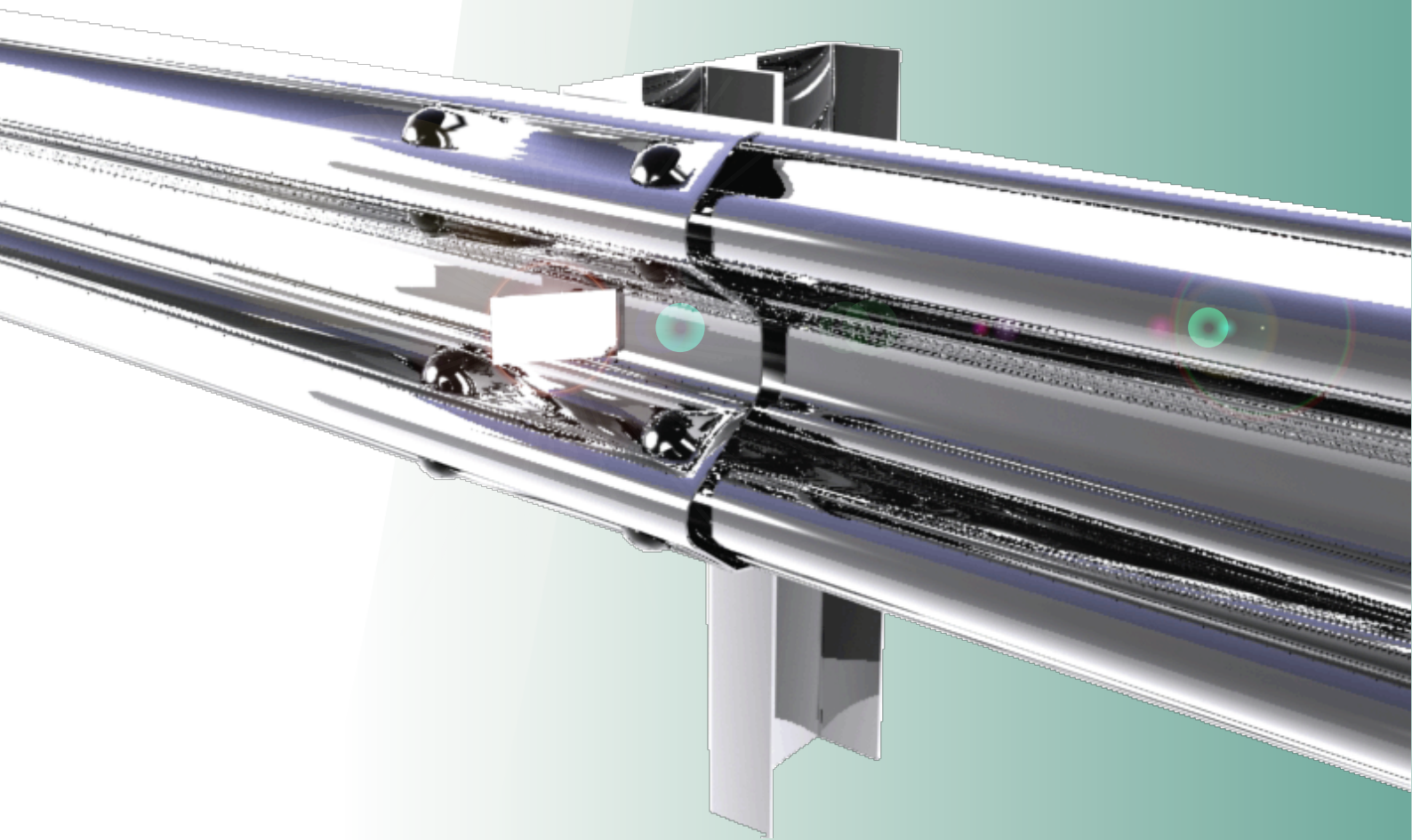
MUAR CATHAY INDUSTRIES SDN. BHD.

(465954-V)



**SIRIM
QAS**

Report Number
2009CB1837



SAVING LIVES OUT OF STEEL

SUPPLY INSTALLATION MAINTENANCE

HIGHWAY GUARDRAIL PRODUCT FEATURES & APPLICATION

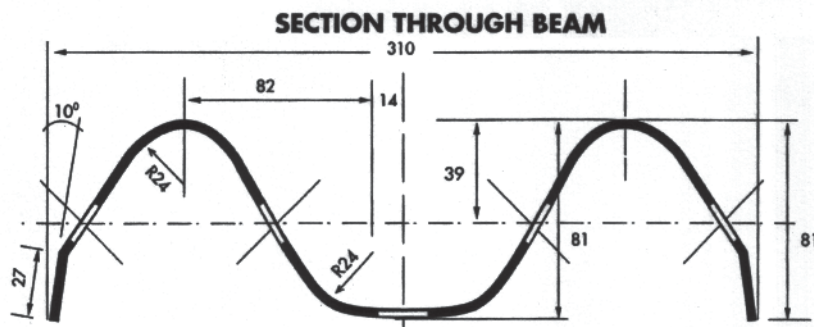
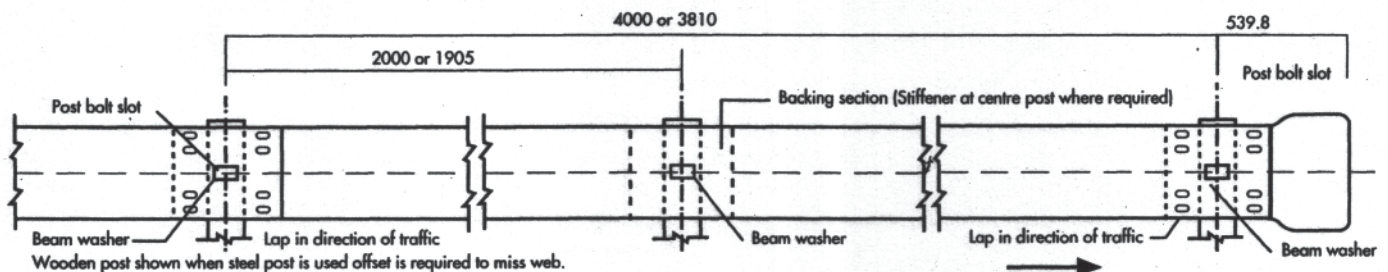
MCI Guardrail is a widely accepted highway safety product used the world over as a safety system providing not only traffic delineation, but also protection in the event of vehicular loss of control. Installed in the median of a divided highway, or along the curb lanes of highways and two-lane roads, the continuous steel guardrail absorbs the shock of vehicle impact and guides the vehicle in the direction of the traffic flow. The net result of this system is to reduce the tendency for out-of-control vehicles to rebound into the path of following or on-coming traffic.

- * Longitudinal strength due to the continuous nature of W Beam
- * Low maintenance * Impact resistance * Durability
- * Acceptance – widely accepted by highway departments for many decades
- * Versatility – can be supplied in various configurations
- * Various accessories available designed to suit particular site conditions
- * Economical – both materials and installation

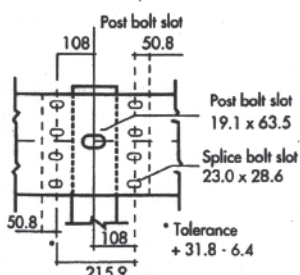
SPECIFICATION AND TECHNICAL DATA

- Base Metal specification to AASHTO M180-00
 Minimum Yied Strength : 345 N/mm2
 Minimum Tensile Strength : 483 N/mm2
 Minimum Elongation : 12%
 Material Thickness : 2.5mm ~ 2.6mm
- Galvanising specification to AASHTO M180-00
 - 1100g/m2 minimum single spot test
 - 1220g/m2 triple spot test
- Mci dimension to AASHTO - M180-00

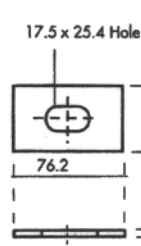
TYPE	EFFECTON LENGTH (MM)	OVERALL LENGTH (MM)	NOMINAL UNCOATED THICKNESS (MM)	WEIGHT (KG)
1	3810	4128	2.67	44.0
2	4000	4318	2.67	46.0



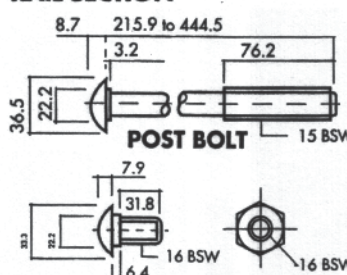
RAIL SECTION



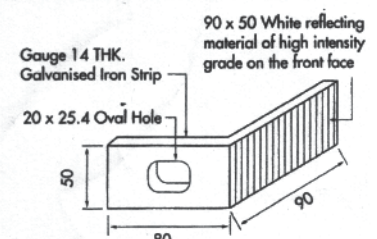
BEAM SPLICE



SPLICE WASHER



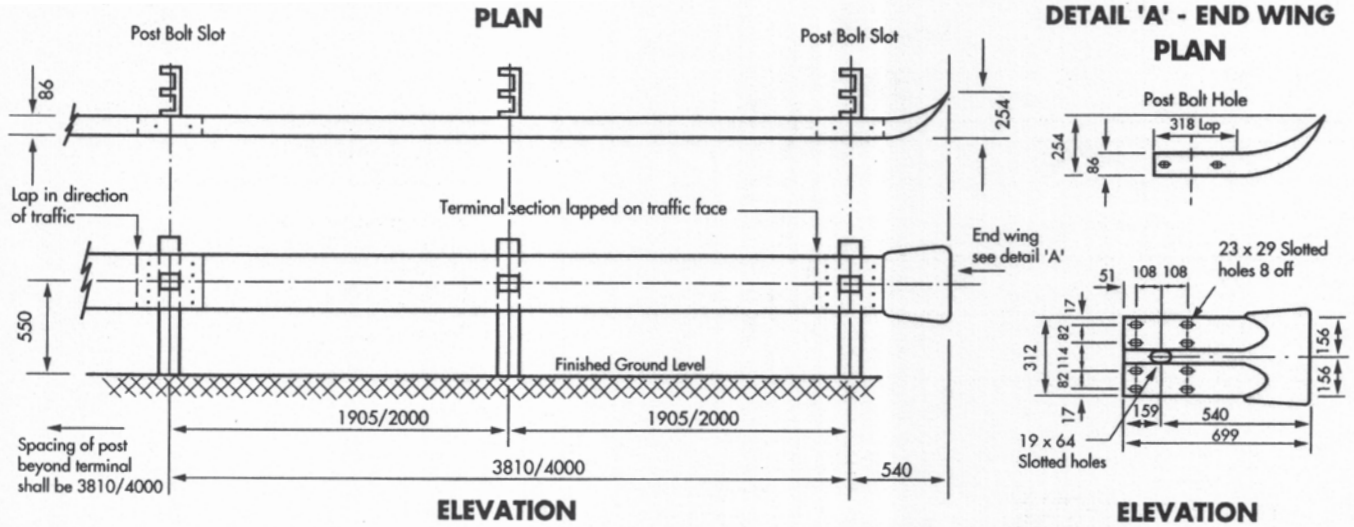
SPLICE BOLT & NUT



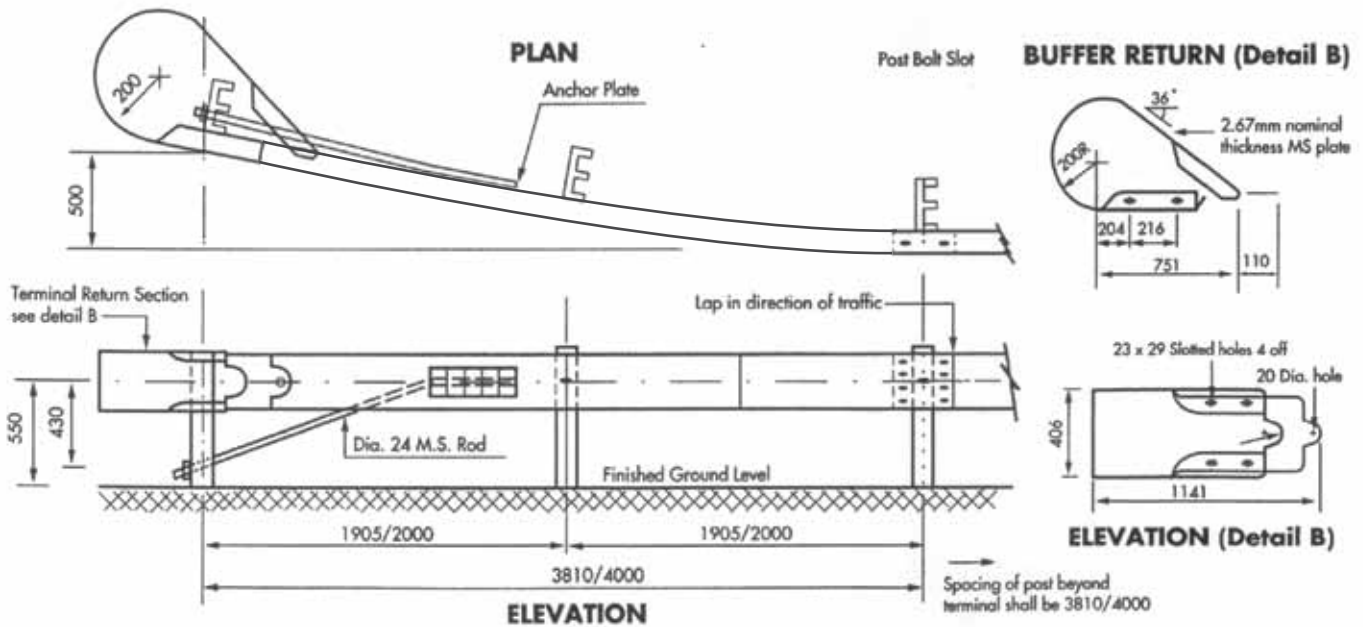
DELINEATOR STRIP

NOTE: All dimension are subject to manufacturer's except where allowable tolerance are shown.
All dimension are millimetre

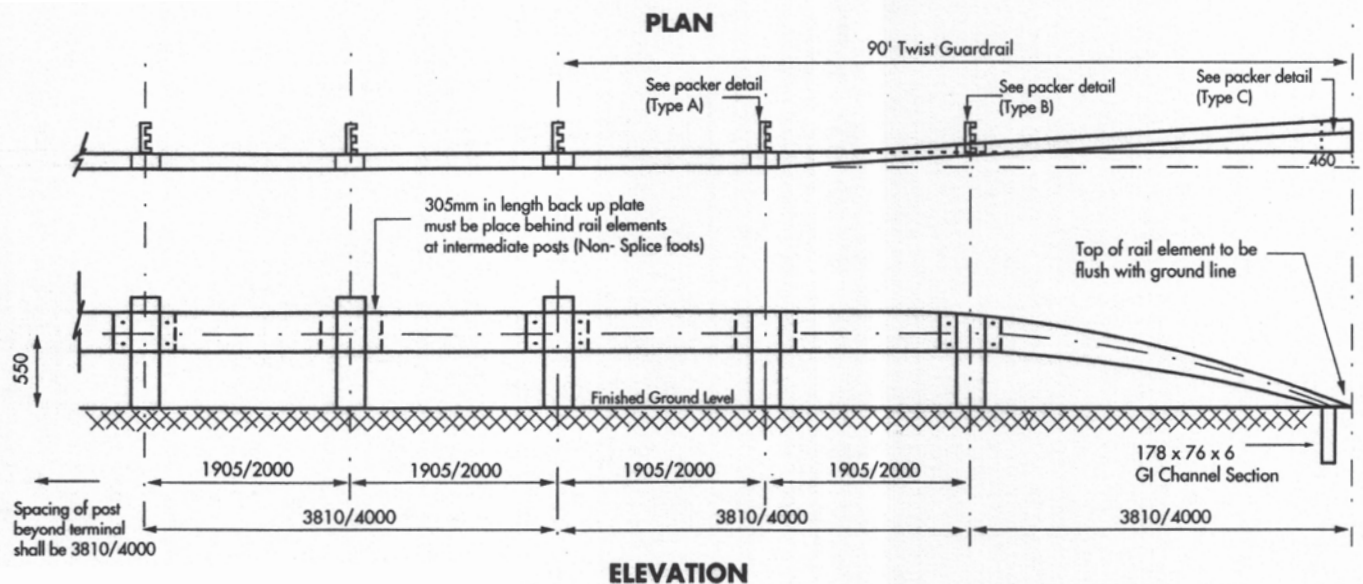
TERMINAL UNIT (TYPE 1)



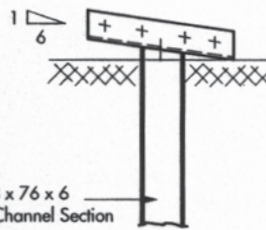
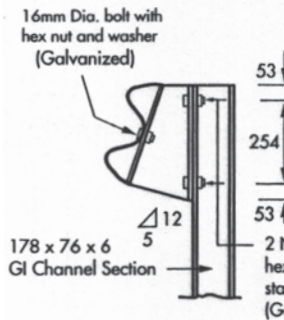
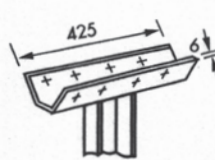
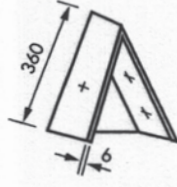
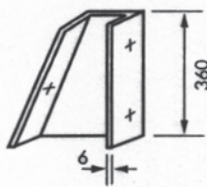
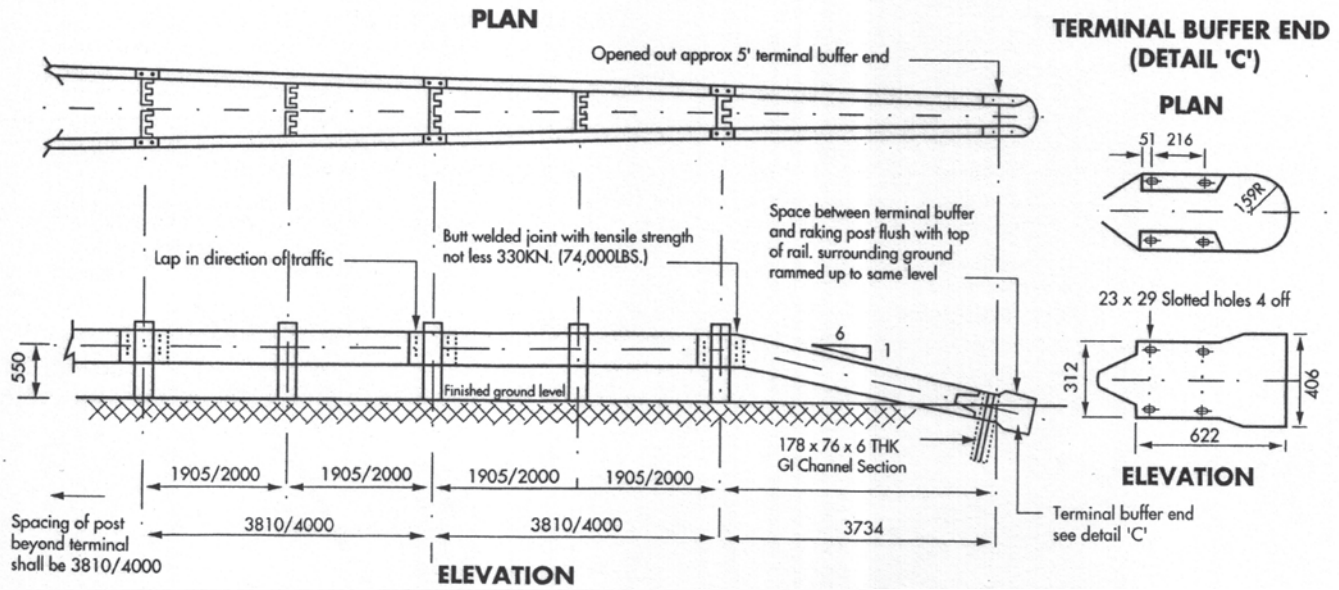
TERMINAL ANCHORAGE UNIT OR FLARE END (TYPE 2)



TERMINAL SECTION 1:6 (TYPE 3)



90° TWIST TERMINAL ANCHORAGE UNIT (TYPE 4)



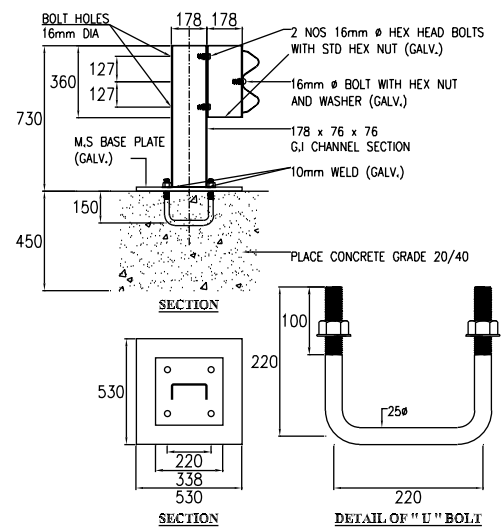
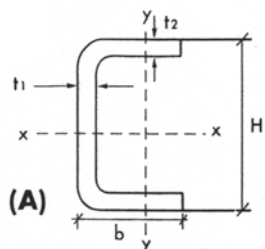
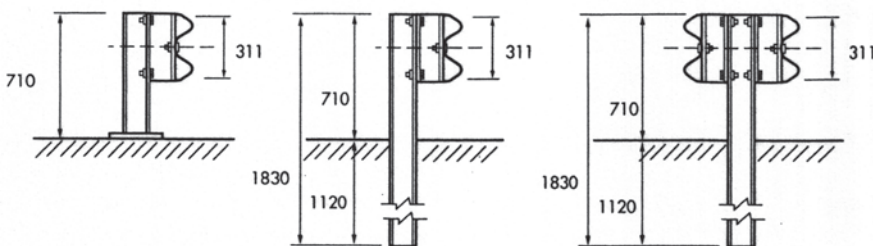
PACKER (TYPE A)

PACKER (TYPE B)

PACKER (TYPE C)



POST



GUARDRAIL FOR ROCK FOUNDATION

TYPE	H x B x t2 x T1 (mm)	Unit Weight (kg/m)	Section Area (cm ²)	Moment Of Inertia		Section Modulus	
				Lx (cm ²)	Ly (cm ⁴)	Sx (cm ³)	Sy (cm ²)
A	C178 x 76 x 6 x 6	14.3	19.08	903.5	102.5	101.5	52.0

Introduction



Muar Cathay Industries S/B (MCI) is incorporated in Year 1998. We specialize in fabricating metal products, steel structure, aluminium architectural products, commercial signboard and blinds.

The company provides **ONE-STOP-CENTRE** to meet the future demand and has form a strong team with experienced designer and technical personnel to fulfill customer's requirements.

To the change of the trends in special industry field, we are investing in manufacturing metal door and window frame, roller shutter, custom made metal or aluminium ceiling and highway guardrail.

Muar Cathay Industries Sdn. Bhd. (465954-V)

Factory : Pos 764, Lot 2407, Pt Bakar Darat, Off Jalan Sri Tanjong,
84010 Muar, Johor, Malaysia.
Tel: (606) 981-3399 Fax: (606) 981-3366
Email : admin@cathay.com.my
Website : www.cathay.com.my

The Associates Company

Aicon (M) S/B

- A related company of **MCI**, incorporated in 1984. Join the construction industry in 1985.
- The company has completed the following projects in Malaysia:
 - (a) Housing Estate
 - (b) Factories
 - (c) Resort

Services & Installations

1. Steel
 - Gutter canopy & Awning
 - Fabricate & install steel portal frame
 - Metal perforation, cutting & bending
 - Metal roofing, GI purlin, ridge capping & Flashing
2. Guardrail
 - Guardrail post, packer & beam
3. Aluminium Architectural Products
 - Strip ceiling, Tile ceiling & custom made ceiling
 - Wall Cladding, Curtain Wall & Compostite panel cladding
 - Aluminium partition, Shop-front, Door and Window c/w Glass
 - Venetian Blinds & Vertical Blinds
4. Commercial Signboard