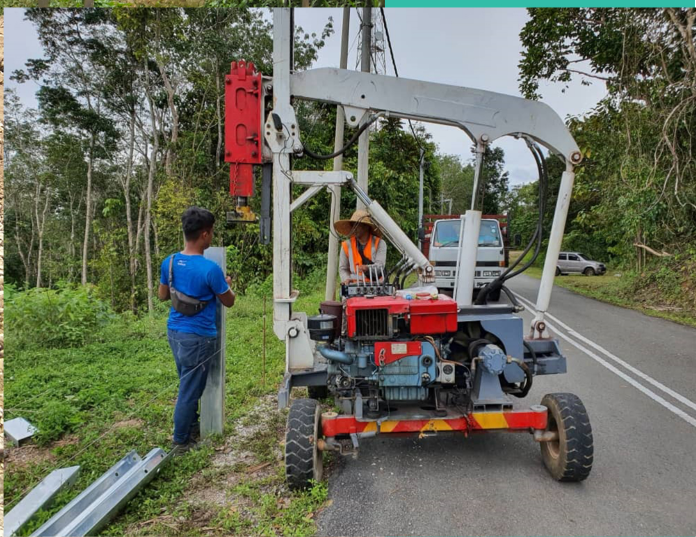
YOUR PARTNER IN HIGHWAY GUARDRAIL
SUPPLY | INSTALLATION | MAINTENANCE

HIGHWAY GUARDRAIL



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HIGHWAY GUARDRAIL PRODUCT FEATURES & APPLICATION

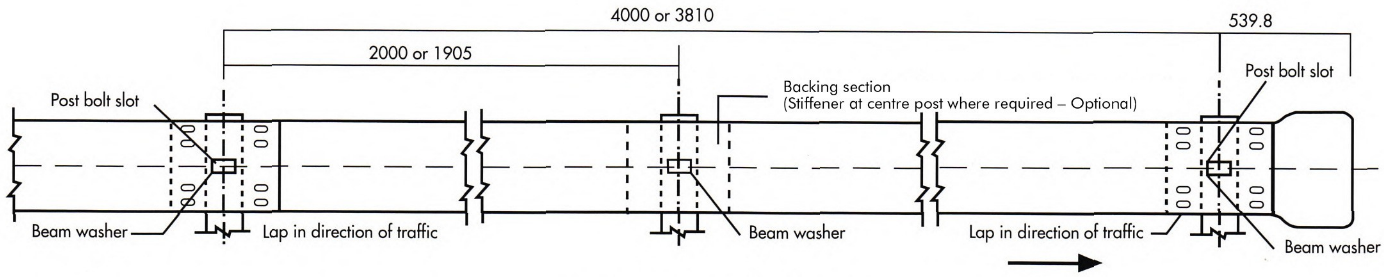
* To Provide Railing Protection To Motor Vehicle At Dangerous Road Area Such As
  - Steep Slope
  - Obscure Curve/Bend
  - High Embankment
  - Sharp Corner
* To Absorb Sudden Impact During Collision Thus Minimise Injury To Vehicle And Passenger.
* To Act As A Directional Railing For Vehicle Moving In The Right Direction.
* To Act As A Median Barrier For Avoiding Head On Collision.
* To Act As A Protective Barrier For Pedestrian Along The High Way.

SPECIFICATION AND TECHNICAL DATA

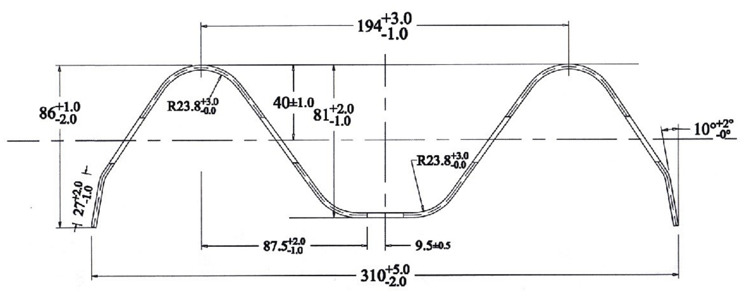
1. Base Metal specification comply to AASHTO M 180-00 (2008)
   - Minimum Yield Strength : 345 N/mm^2
   - Minimum Tensile Strength : 483 N/mm^2
   - Minimum Elongation : 15%
2. Galvanising specification comply to:
   - AASHTO DESIGNATION: M 111M/ M 111-09
   - BS EN ISO 1461: 2009
3. PRESTAR dimension comply to AASHTO M 180-00 (2008)

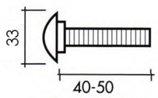
TYPE	EFFECTION LENGHT (MM)	OVERALL LENGHT (MM)	NOMINAL THICKNESS (MM)
PE 1	3810	4128	2.67
PE 2	4000	4318	2.67
PE 3	3810	4128	3.00
PE 4	4000	4318	3.00

(Tolerance allowable under specified thickness)

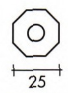


SECTION THROUGH BEAM

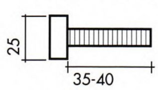




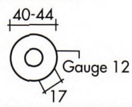
POST BOLT



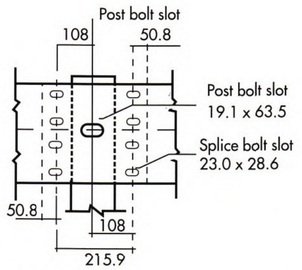
HEX NUT



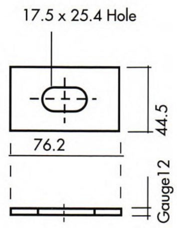
HEX BOLT



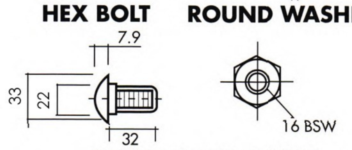
ROUND WASHER



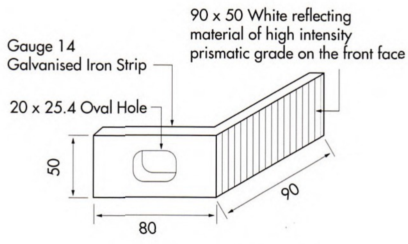
BEAM SPLICE



SPLICE WASHER



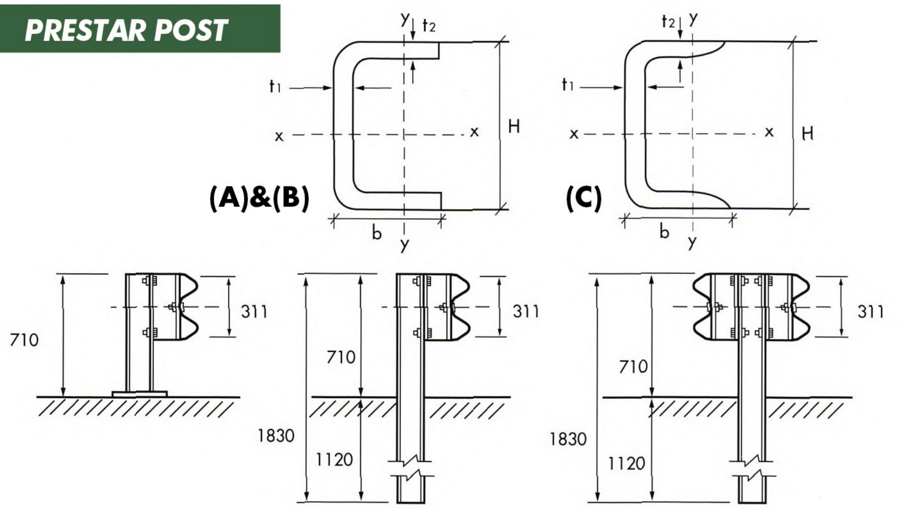
SPLICE BOLT & NUT



DELINEATOR STRIP

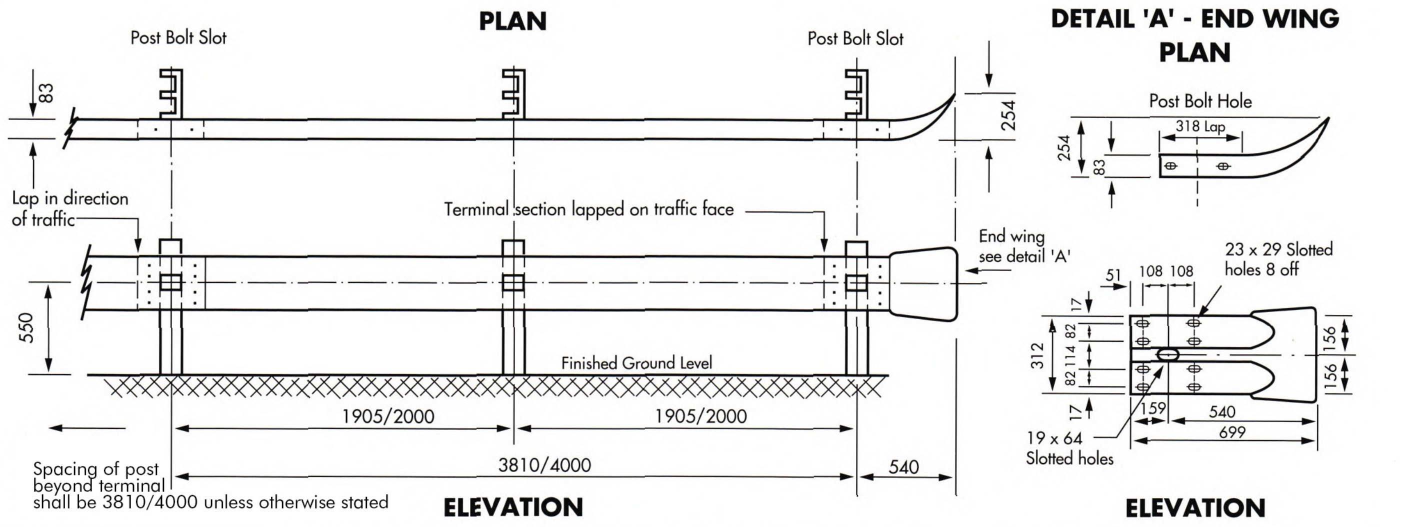
NOTE : All dimension are subject to manufacturer's design tolerance.
All dimension are in millimetre
SIRIM LICENSE NO : PP001801

PRESTAR POST

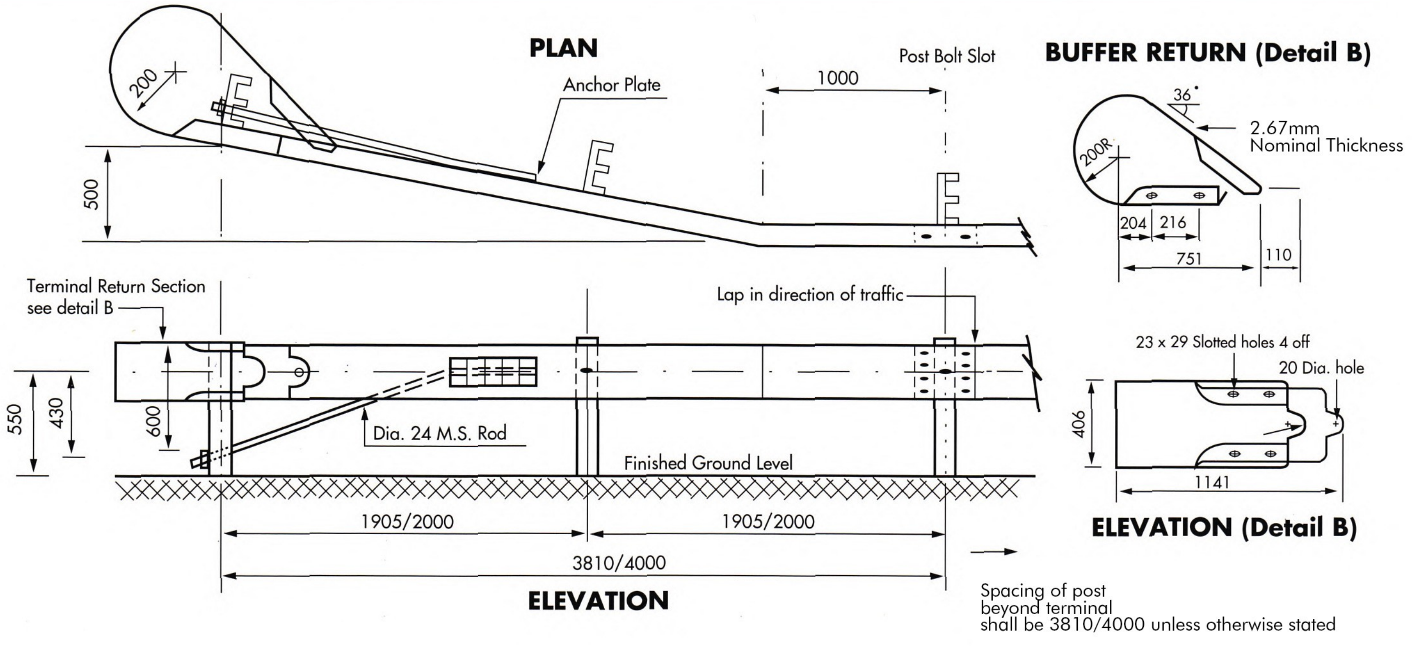


TYPE	H x b x t1 x t2 (mm)	Unit Weight (kg/m)	Section Area (cm^2)	Moment of Inertia		Section Modulus	
				Ix (cm^4)	Iy (cm^4)	Sx (cm^3)	Sy (cm^3)
A	C178 x 76 x 6 x 6	14.3	19.08	903.5	102.5	101.5	52.0
B	C150 x 76 x 6 x 6	13.2	17.50	610.0	98.0	80.3	45.3
C	C125 x 65 x 6 x 8	13.4	17.11	425	65.5	68.0	14.4

TERMINAL UNIT (TYPE 1)

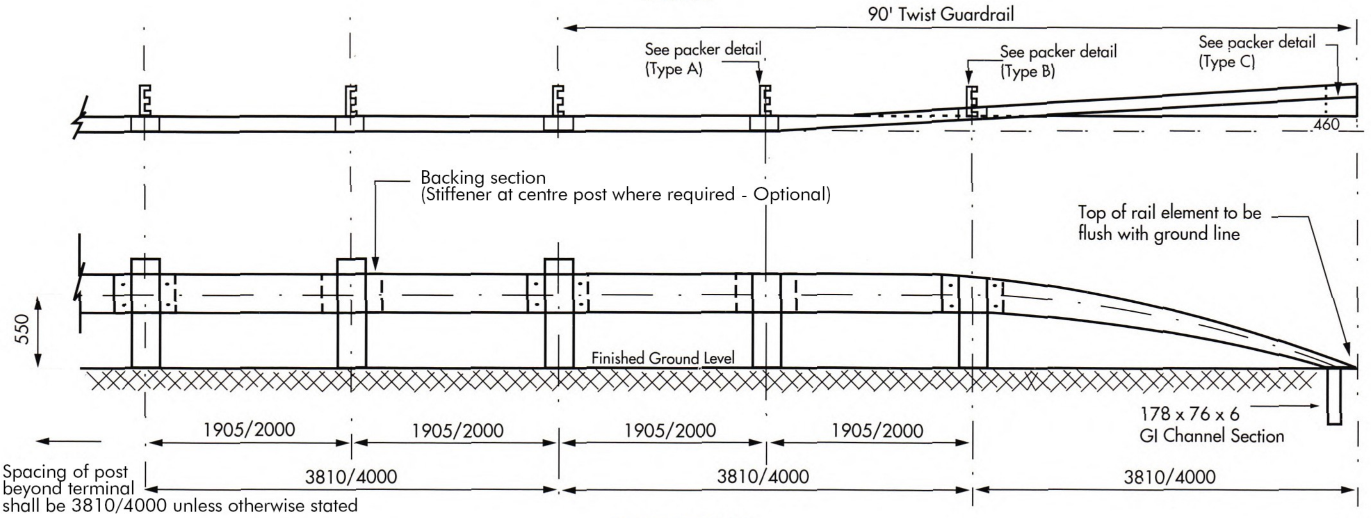


TERMINAL ANCHORAGE UNIT OR FLARE END (TYPE 2)



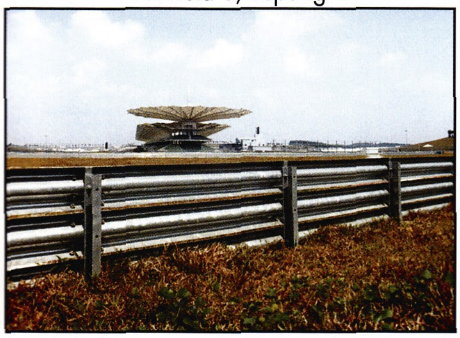
90^0 TWIST TERMINAL ANCHORAGE UNIT (TYPE 3)

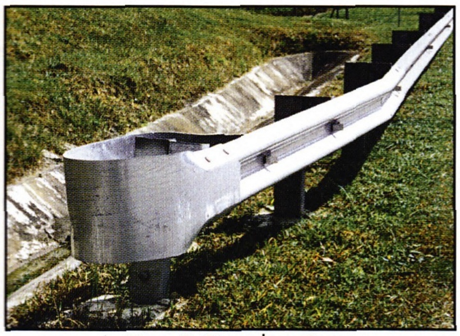
PLAN



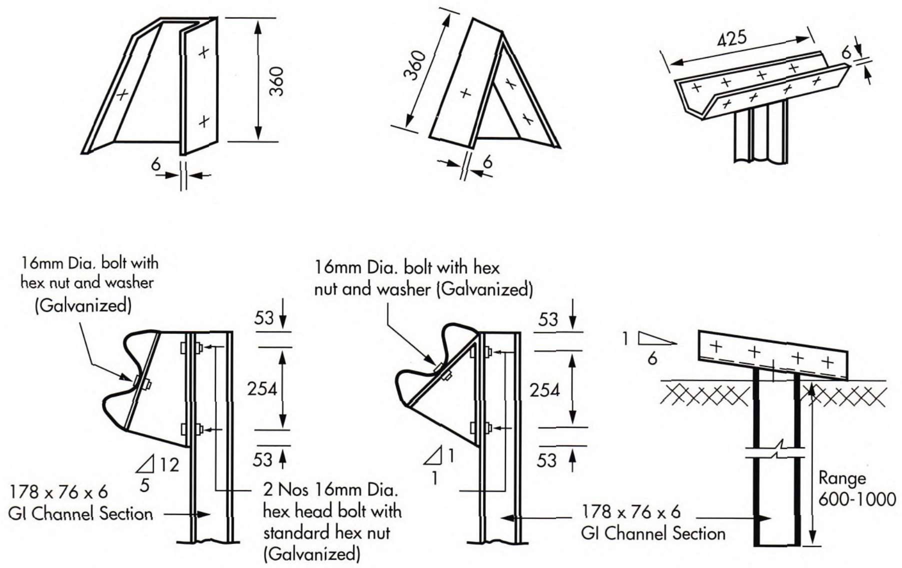
ELEVATION

Formula 1, Sepang





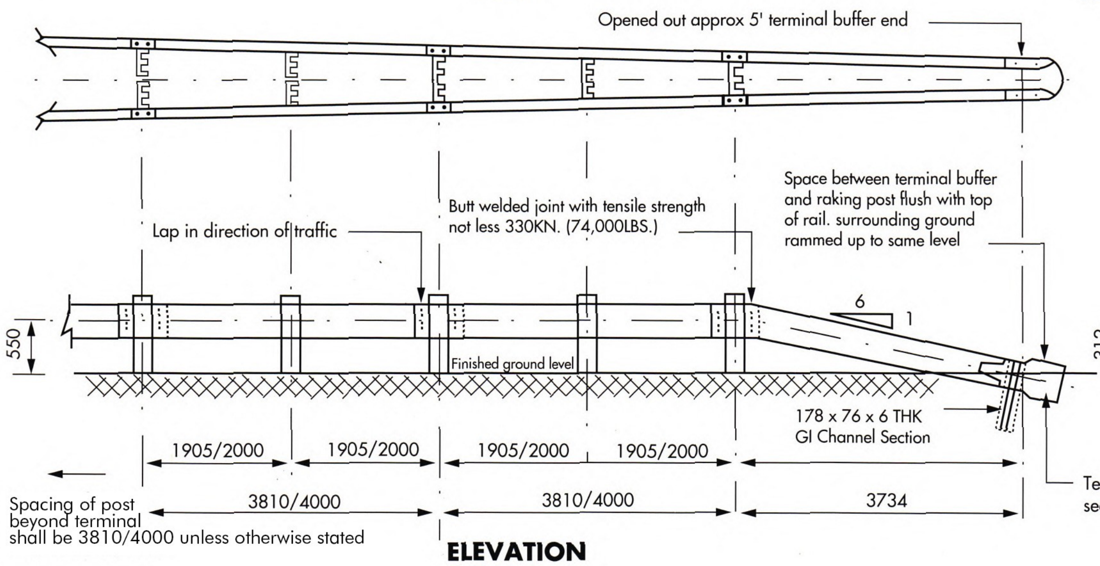
Type 2 Complete Set



PACKER (TYPE A) **PACKER (TYPE B)** **PACKER (TYPE C)**

TERMINAL SECTION 1:6 (TYPE 4)

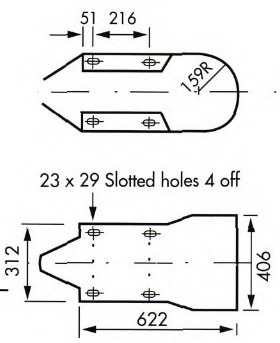
PLAN



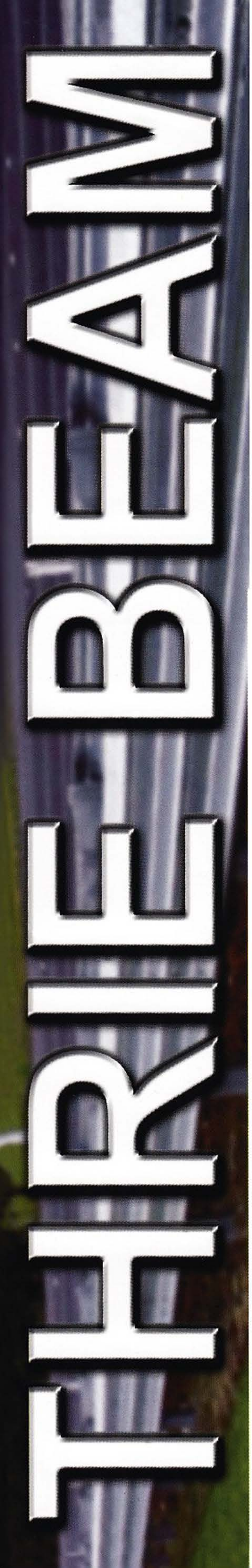
ELEVATION

TERMINAL BUFFER END (DETAIL 'C')

PLAN



ELEVATION



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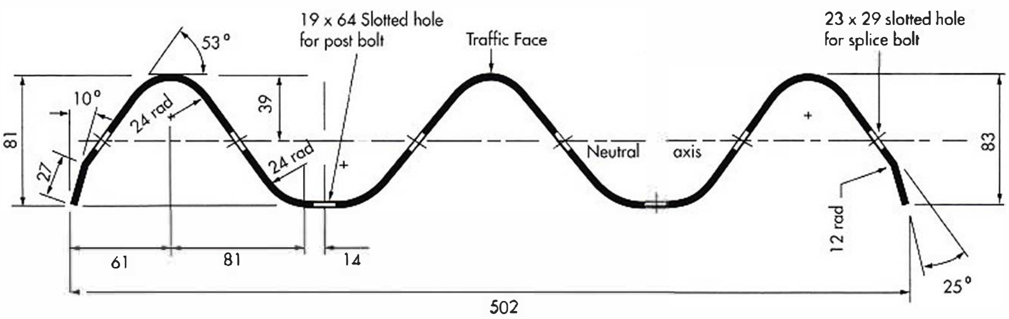
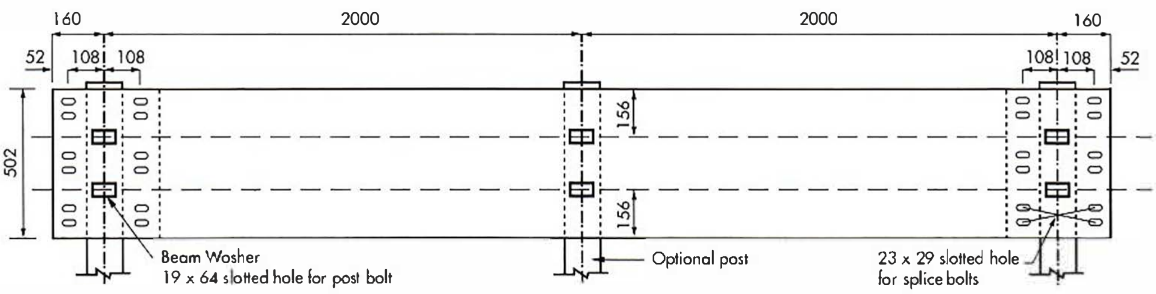
   - BS EN ISO 1461: 1999
3. PRESTAR dimension comply to AASHTO M180-2008

TYPE	EFFECTION LENGTH (MM)	OVERALL LENGTH (MM)	NOMINAL THICKNESS (MM)
PE 5	4000	4318	2.67

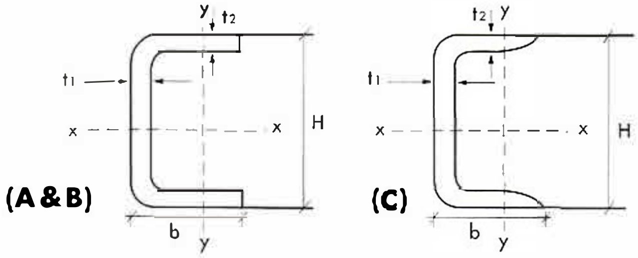


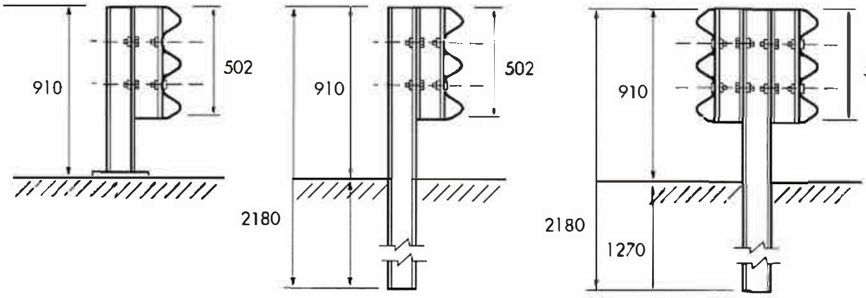
TYPICAL RAIL SECTION



THRIE BEAM
(All dimension are subject to manufacture tolerance)
All dimension are in mm

PRESTAR POST





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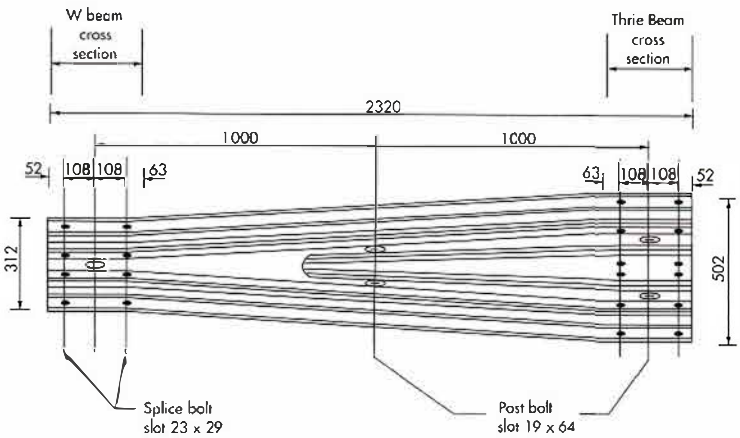
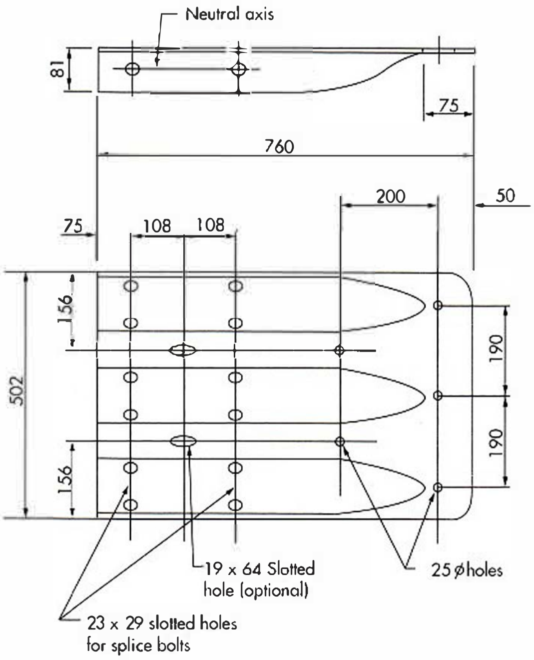
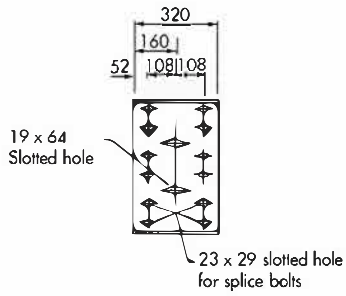


W BEAM TO THRIE BEAM TRANSITION RAIL



THRIE BEAM TERMINAL CONNECTOR



BRIDGE ENDPOST CONNECTION BRACKET