



DML ENGINEERING SDN. BHD.

manufacturer of road safety guardrail

GUARDRAILS

Safety Always



INTRODUCTION

DML Engineering is a Malaysian wholly owned manufacturer producing intergrated Malaysia incorporated manufacturer of Highway Guardrail & Accessories, and install Road Safety Barriers, End Terminals, Carpark and Warehouse Barriers, Handrail. And all the products are galvanized or powder coated surface treatment, and we do have the other services like powder coated and steel welding services. Our products are manufactured strictly conforming to (AASHTO) standard and certified by Sirim.

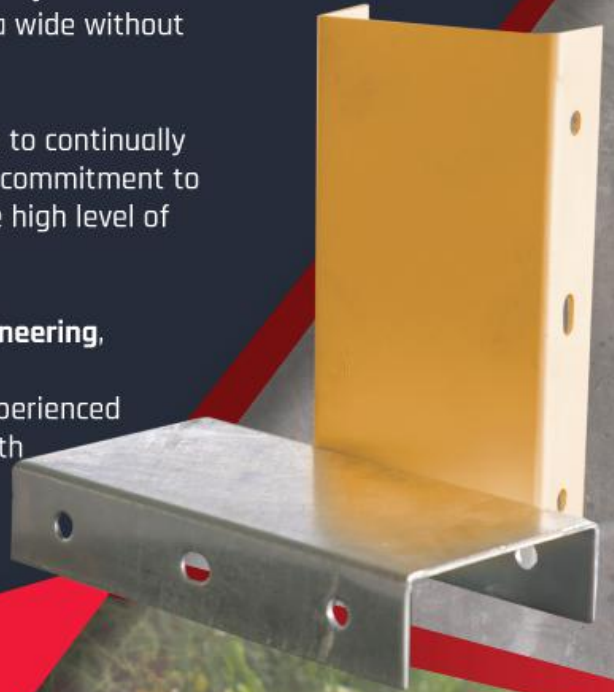
Our knowledge and skills are augmented by a strong emphasis on performance, quality, teamwork and a "hands-on" management approach. We listen to our customer needs and aim to always delivery the most cost-effective, highest quality solution to all projects and client needs. We deliver our products Malaysia wide without sacrificing products quality or service.

We have been in the guardrail business since 2017 and aim to continually improve our products and services well into the future. Our commitment to ensuring ongoing customer satisfaction is rewarded by the high level of repeat business we receive from our customers.

We like to think of our clients enjoy working with **DML Engineering**, because of the friendly and co-operative way we work. And our installation teams are fully knowledgeable and experienced in all our products ensuring installations are carried out with the least amount of disturbance to our customers.

WHY DML ENGINEERING?

- ✓ Malaysia Owned & Manufactured
- ✓ Competitive Pricing
- ✓ Quality of Product
- ✓ Personal Service



Highway Guardrail Product Features & Application

- To provide railing protection to motor vehicle at dangerous road area such as
 - Steep Slope
 - High Embankment
 - Obscure Curve/Bend
 - 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 & Technical Data

1. Base Metal specification to AASHTO M180-12

- Minimum Yield Strength: 345N/mm²
- Minimum Tensile Strength: 483N/mm²
- Minimum Elongation: 15%

2. Galvanising specification comply to AASHTO M 180-12

- 1100g/m² minimum single spot test (for both side)
- 1220g/m² triple spot test (for both side)

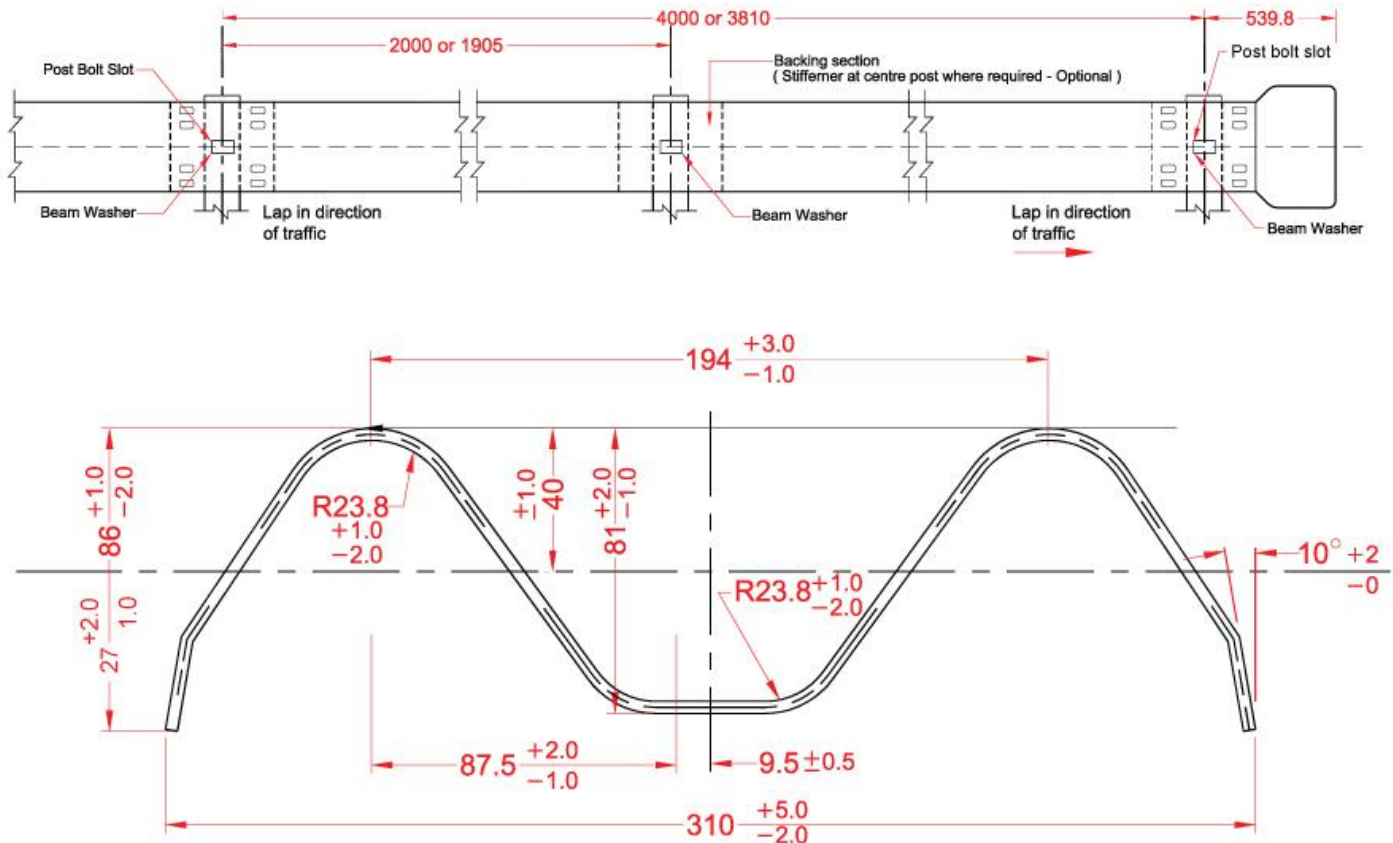
3. DML Dimension to AASHTO M 180-12

4. DML Powder Coating

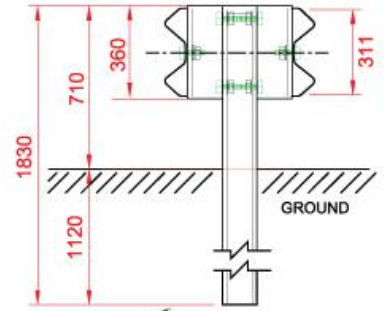
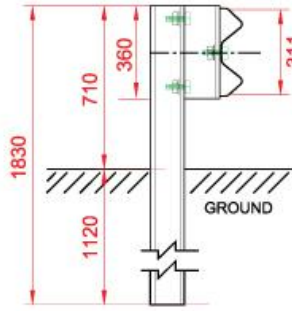
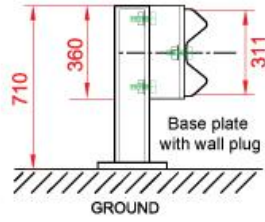
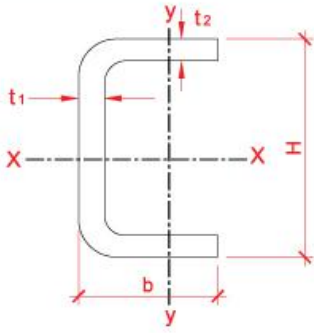
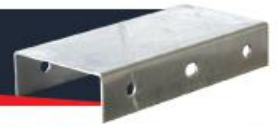
TYPE	Effecton Length (mm)	Overall Length (mm)	Nominal Thickness (mm)
DML 1	3810	4128	2.67
DML 2	4000	4318	

*Tolerance allowable under specified thickness and after bend

Section Through Beam



DML C- Post / Packer



TYPE	H x b x t1 x t2 (mm)	Unit Weight (kg)	Length (mm)	Customize Length (mm)
A	C178 x 76 x 6 x 6	23	1830 / 2100 and 360 (Packer)	300 - 2500
A2	C178 x 76 x 5 x 5	19		
B	C150 x 76 x 6 x 6	13.2		

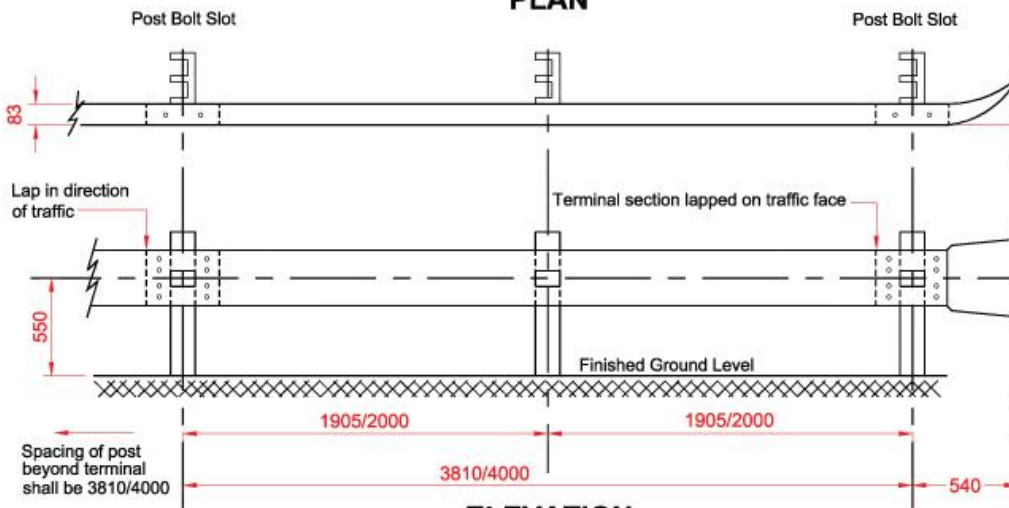
*Tolerance allowable under specified thickness and after bend



Terminal Unit (Type 1)

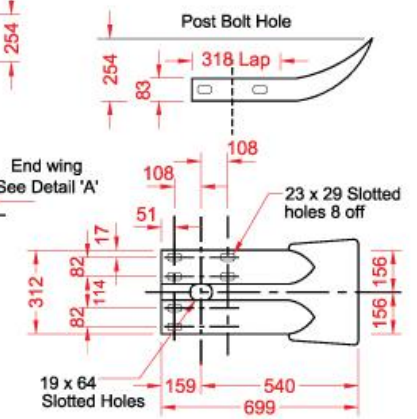


PLAN



ELEVATION

DETAIL 'A' - END WING PLAN

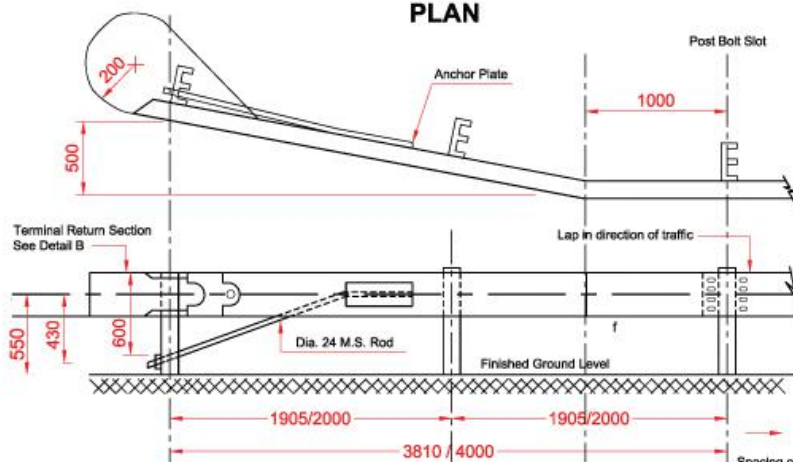


ELEVATION

Terminal Anchorage Unit (Type 2)

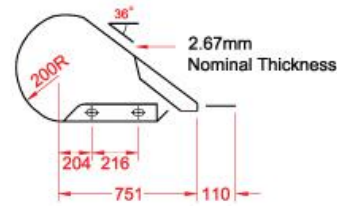


PLAN

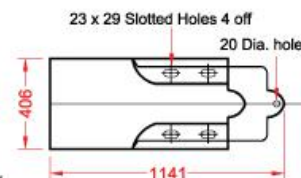


ELEVATION

BUFFER RETURN (Detail B)



ELEVATION (Detail B)

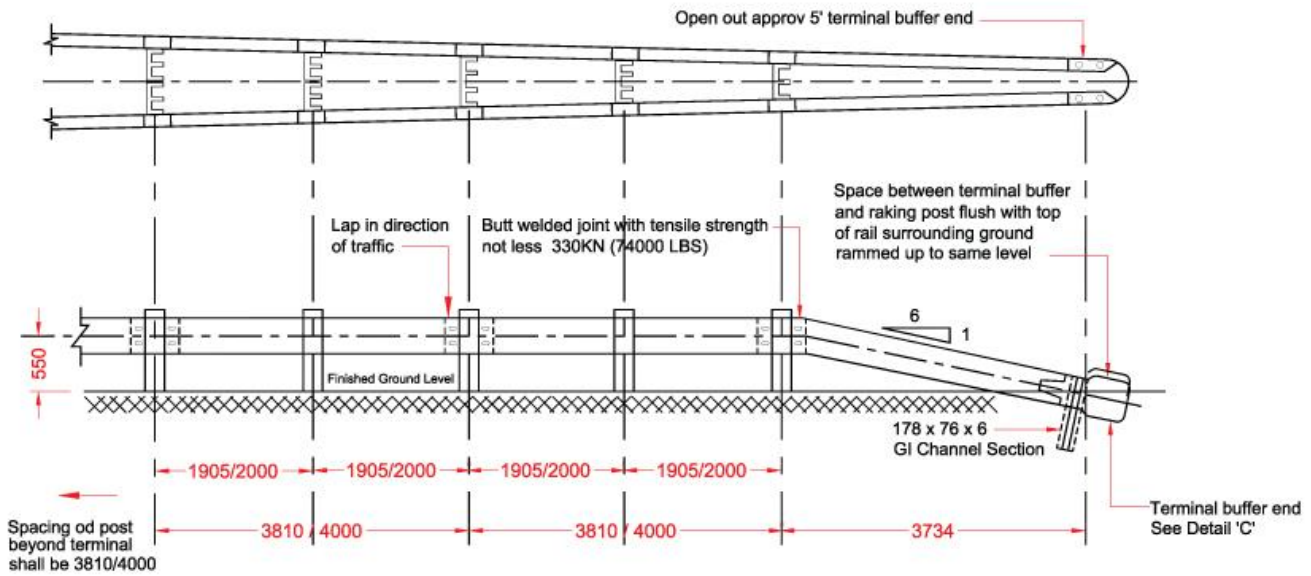


Spacing of post beyond terminal shall be 3810/4000 unless otherwise stated

Terminal Section 1:6 (Type 4)

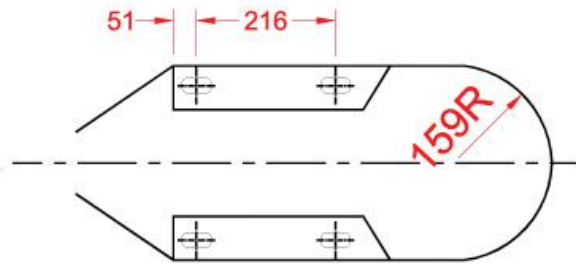


PLAN



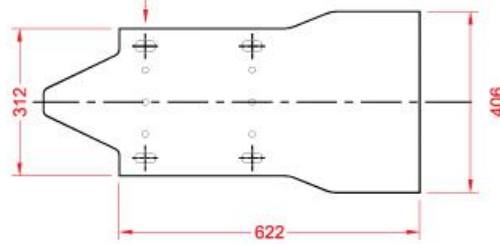
TERMINAL BUFFER END (DETAIL 'C')

PLAN



ELEVATION

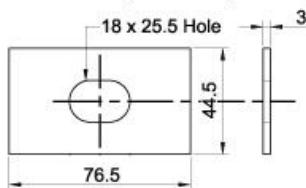
23 x 29 Slotted holes 4 off



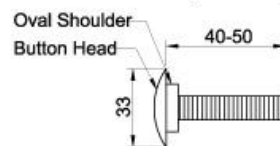
Accessories



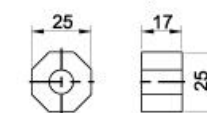
BEAM WASHER (Scale: 1/2)



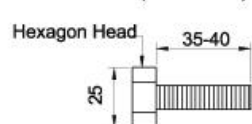
POST BOLT (Scale: 1/2)



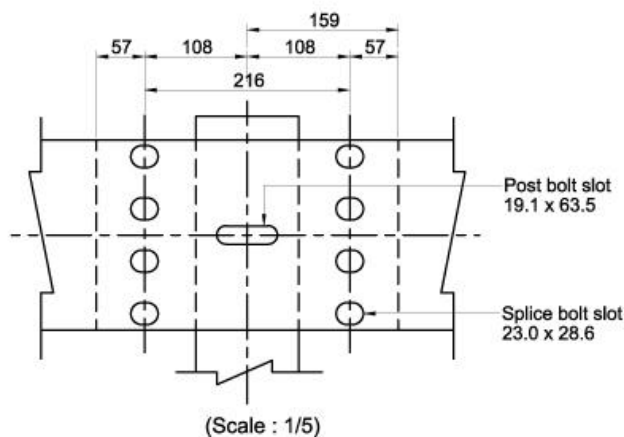
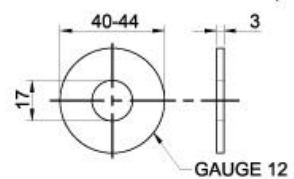
HEX NUT (Scale: 1/2)



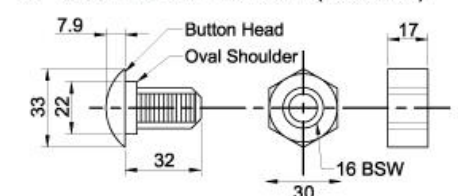
HEX BOLT (Scale: 1/2)

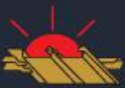
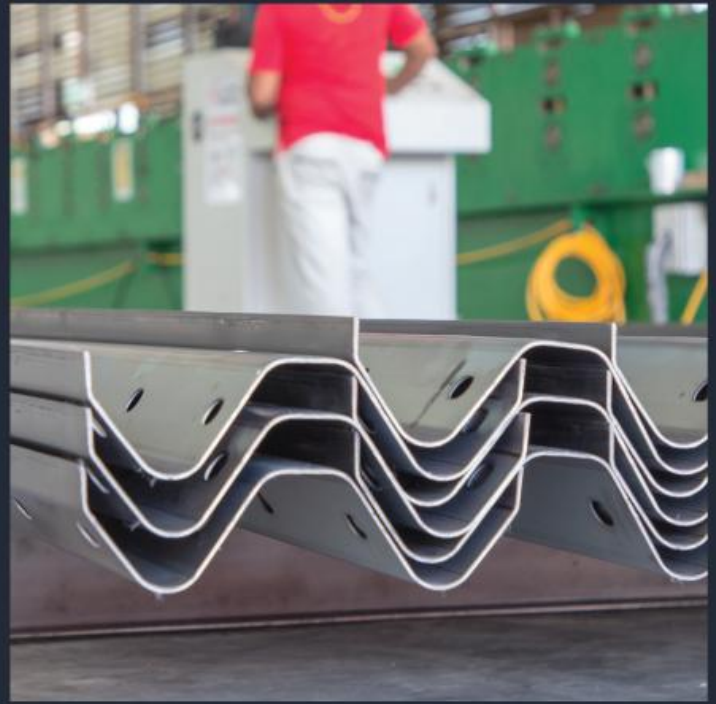


ROUND WASHER (Scale: 1/2)



SPLICE BOLT & NUT (Scale: 1/2)





DML GROUP OF COMPANY

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CERTIFICATE:



QUALITY ENSURED:



**DURABLE
FIRE RATED
ECONOMICAL**