



SONIC CAPITAL GROUP GUARDRAIL SYSTEMS PRESENTATION (VPN STEEL GROUP)



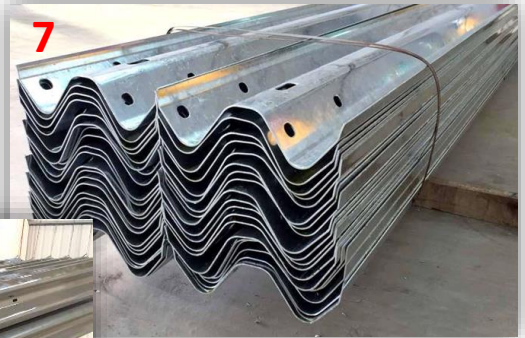
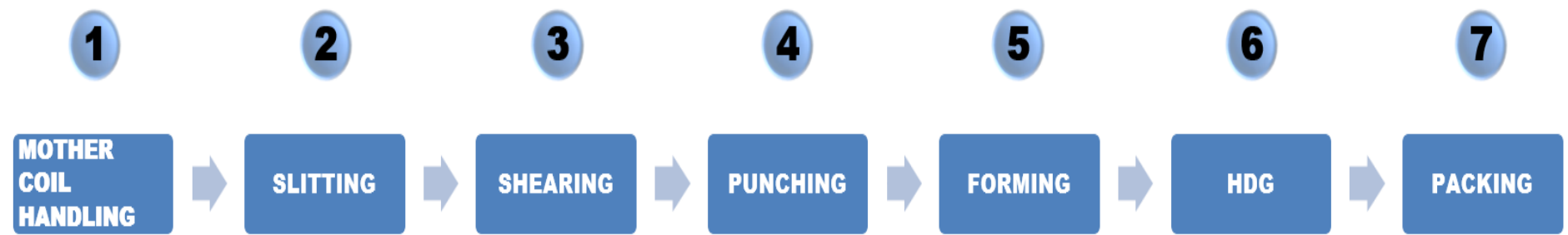
Guardrail : Requirement VS Compliance

	GUARDRAIL MATERIAL REQUIREMENTS (AASHTO M180)	VPN (M) SDN BHD COMPLIANCE (AASHTO M180)
Thickness (Base Metal)	2.67mm	2.75mm
Galvanizing	1100 g/m ² Min Single Spot	x 1313.5 g/m ² Min Single Spot
Min Yield Strength	345 MPa	x 515 MPa
Min Tensile Strength	483 MPa	x 538.5 MPa
Elongation (50mm Test Piece)	12% Min	17%

Guardrail : Advantage of VPN Guardrail

	Advantages
Compliance	100% follow JKR specification
Delivery	Deliver on or ahead of schedule
Price	Competitive Price
Material	100% Prime material within 10 months stock aging

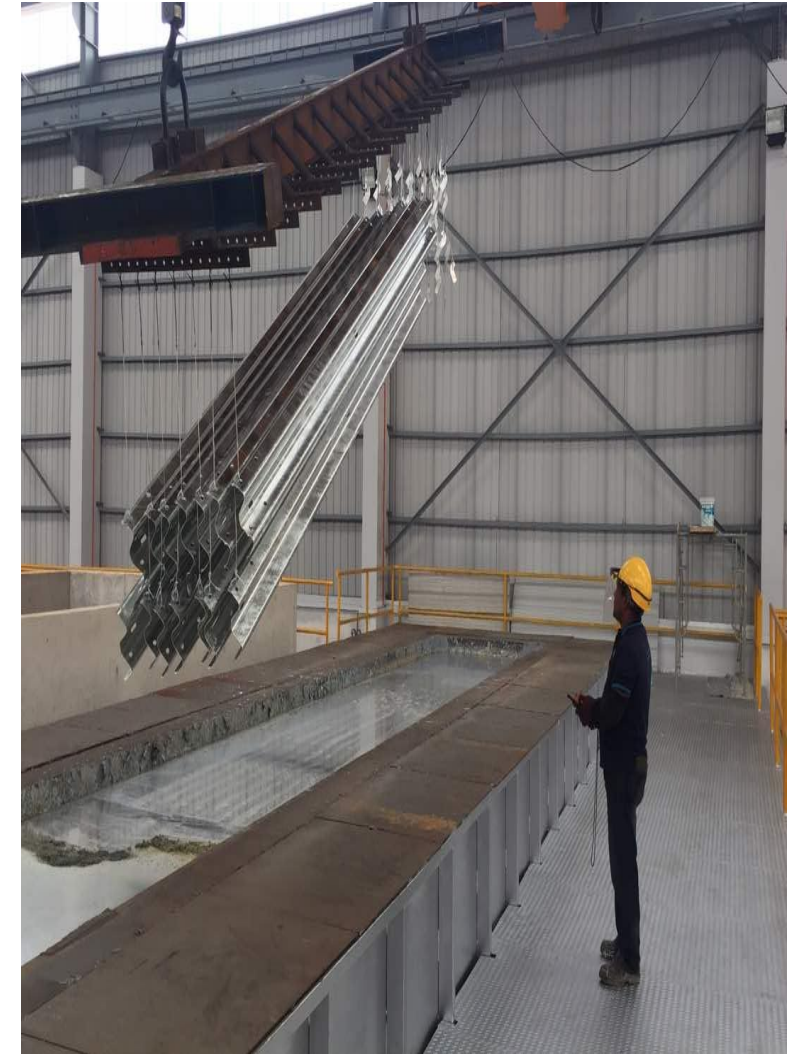
Production Process Flow (Completely in-house)



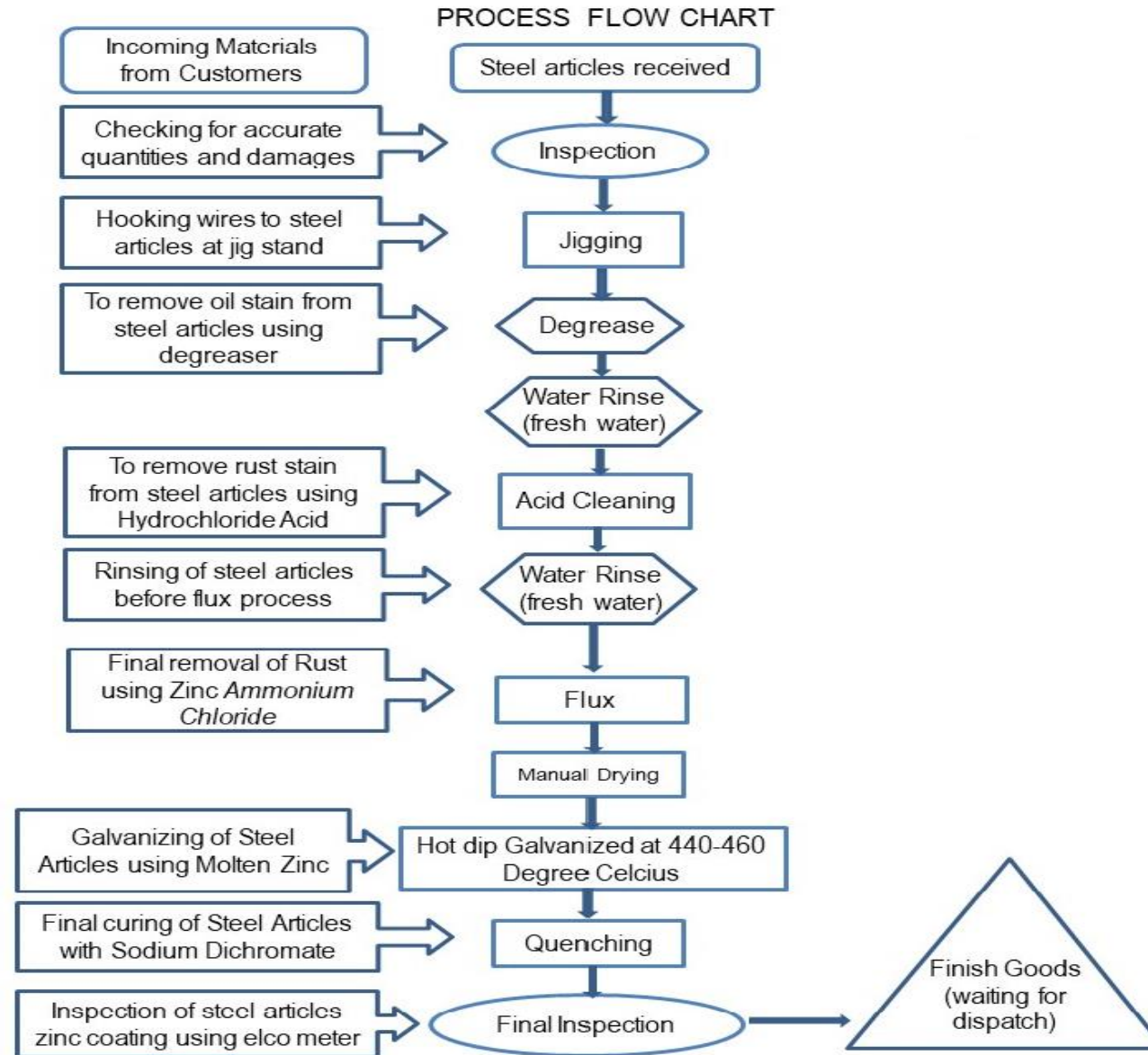
In-House Hot – Dip Galvanizing Capability

With a manufacturing capacity of 3,000 metric tonne per month, we are equipped with the latest state of the art high tech production line in the industry comprising of the following:

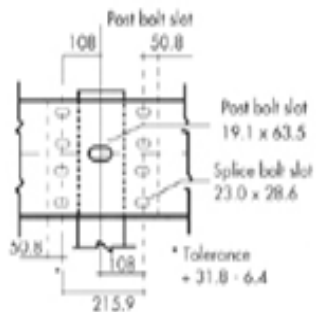
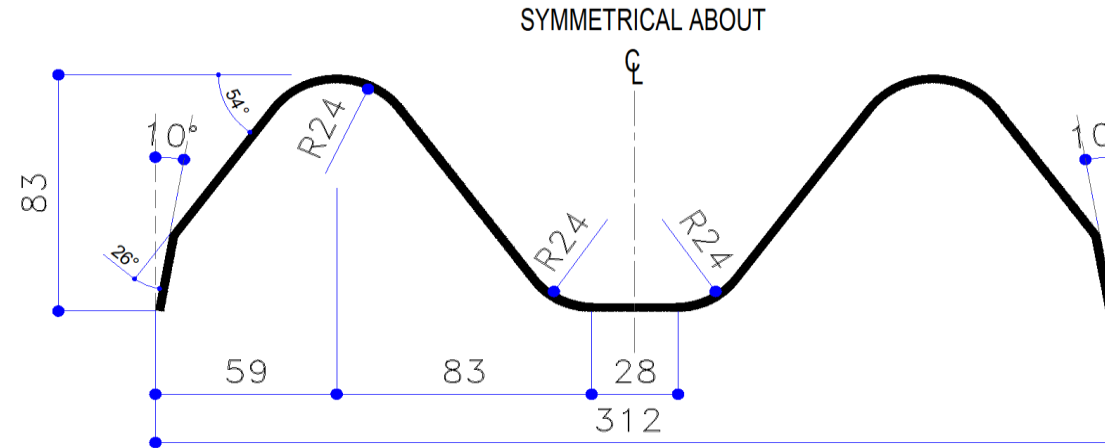
- Heavy Duty Auto Electro-Slag Welded Hot Dip Galvanizing Kettle – **12.5m (length) x 1.8m (width) x 2.6m (depth)**
- High Velocity Fully Automated Natural Gas Fired Furnace System
- Fully Automated Waste Water Treatment Plant (DOE compliance)
- Fully Automated Smoke Fume Scrubber Tower System with Top Suction Hood
- 6 units Heavy Duty Over Head Cranes with Synchronize Hoist System
- **2 units of 18M X 3.4M x 120 Tonnes Steel Deck Type Electronic Truck Weighbridge System**



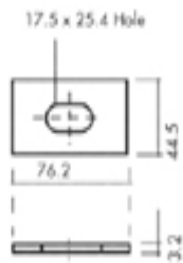
In-House Hot – Dip Galvanizing Process Flow



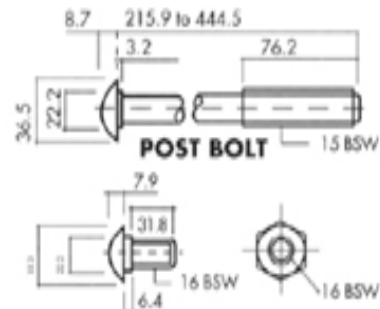
Guardrail : Two Beam Profile



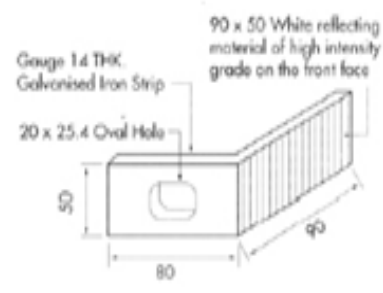
BEAM SPLICE



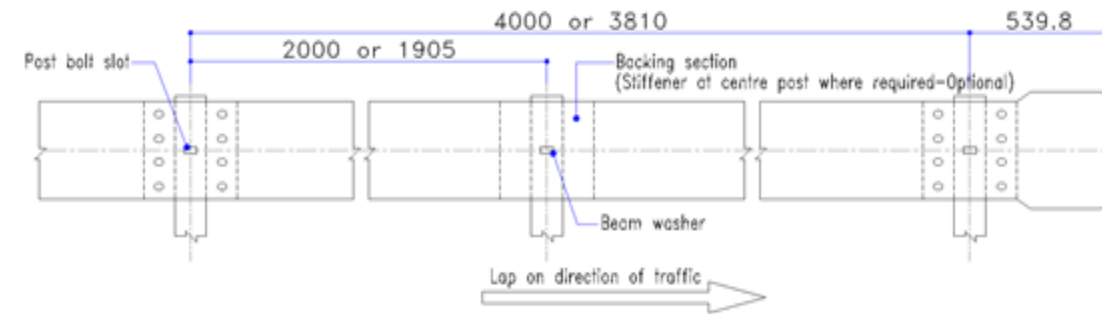
SPLICE WASHER



SPLICE BOLT & NUT



DELINEATOR STRIP



**Guardrail :
Two Beam
Profile Test
Report by SIRIM
QAS International
Sdn Bhd
Report No:
2018CB0550**

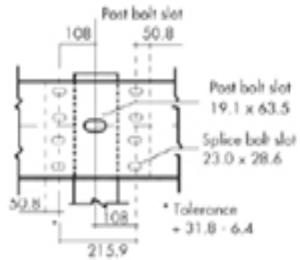
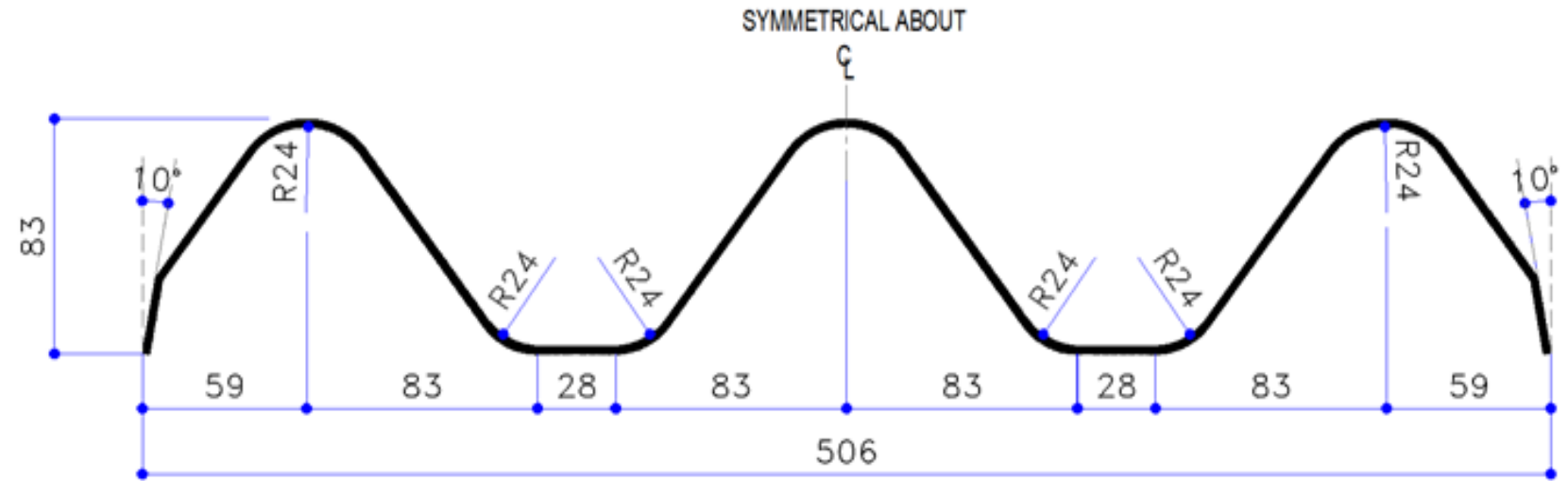
**TEST RESULTS
SAMPLE REFERENCE : W-BEAM (2 BEAM)**

CLAUSE	REQUIREMENT	RESULTS	REMARKS
8.0 MECHANICAL PROPERTIES			
8.1.1 BEAMS AND TRANSITION SECTIONS			
Yield Strength (N/mm ²)	345 min.	522	Pass
Tensile Strength (N/mm ²)	483 min.	546	Pass
Elongation after Fracture (%)	12.0 min.	17.0	Pass
9.1.2 COATING REQUIREMENTS (TYPE 2)**			
Total surface area i.e. both sides (g/m ²)	1100 min.	1197	Pass
10.1 DIMENSIONS			
A (mm)	82.60	83.88	*
B (mm)	81.00	82.63	*
C (mm)	1.60	1.25	*
D (mm)	57.20	53.17	*
E (°)	10.00	11.0	*
F (mm)	23.80	23.70	*
G (mm)	82.60	90.60	*
H (mm)	38.90	40.40	*
I (mm)	23.80	26.63	*
J (mm)	14.30	9.36	*
K (mm)	300.00	306.00	*
L (mm)	27.00	24.49	*
T (with coating) (mm)	2.82 (-0.23 , +no limit)	3.01	Pass

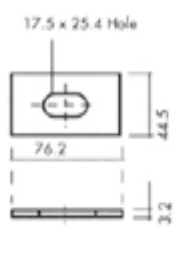
Note: * All dimension are subject to manufacturer's tolerances except where allowable are shown.

** Sub-contracted.

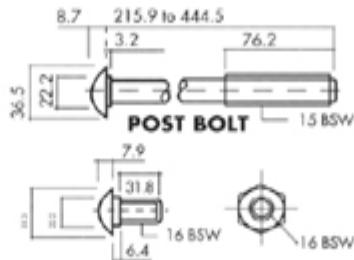
Guardrail : Three Beam Profile



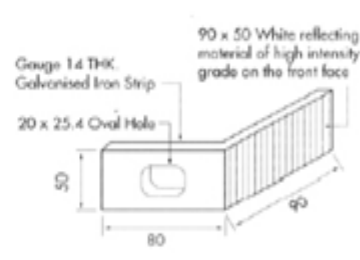
BEAM SPLICE



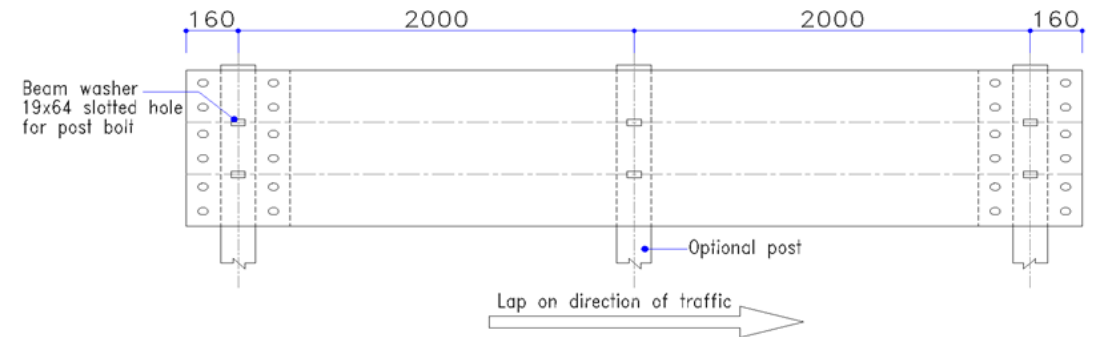
SPLICE WASHER



SPLICE BOLT & NUT



DELINEATOR STRIP



**Guardrail :
Three Beam
Profile Test
Report by SIRIM
QAS International
Sdn Bhd
Report No:
2018CB0550**

SAMPLE REFERENCE : GUARD RAIL (3 BEAM)

CLAUSE		REQUIREMENT	RESULTS	REMARKS
8.0	MECHANICAL PROPERTIES			
8.1.1	BEAMS AND TRANSITION SECTIONS			
	Yield Strength (N/mm ²)	345 min.	508	Pass
	Tensile Strength (N/mm ²)	483 min.	531	Pass
	Elongation after Fracture (%)	12.0 min.	17.0	Pass
9.1.2	COATING REQUIREMENTS (TYPE 2)**			
	Total surface area i.e. both sides (g/m ²)	1100 min.	1430	Pass
10.1	DIMENSIONS			
	A (mm)	82.60	82.10	*
	B (mm)	81.00	81.15	*
	C (mm)	1.60	1.20	*
	D (mm)	57.20	56.50	*
	E (°)	10.00	11.5	*
	F (mm)	23.80	24.80	*
	G (mm)	82.60	82.15	*
	H (mm)	38.90	44.39	*
	I (mm)	23.80	24.90	*
	J (mm)	14.30	13.80	*
	K (mm)	510.00	515.00	*
	L (mm)	27.00	24.91	*
	T (with coating) (mm)	2.82 (-0.23 , +no limit)	2.989	Pass

Note: * All dimension are subject to manufacturer's tolerances except where allowable are shown.

** Sub-contracted

**Guardrail :
Bolt Test Report
by SIRIM QAS
International Sdn
Bhd
Report No:
2018CB0550**

SAMPLE REFERENCE : BOLT

CLAUSE	REQUIREMENT	RESULTS	REMARKS
6.3.3 DIMENSIONS			
A (mm)	23.81 (+1.59 , -0.40)	24.14	Pass
B (mm)	33.34 or 36.51	34.35	*
C (mm)	5.56	6.07	*
D (mm)	7.94	8.21	*
E (mm)	As required	31.35	*
9.4 COATING REQUIREMENTS**			
Coating thickness (µm)	43 min.	Refer to report no. MIAS 2018-067	Pass

Note : *All dimensions are subject to manufacturer's tolerance except where allowable tolerances are shown.

** Sub-contracted.

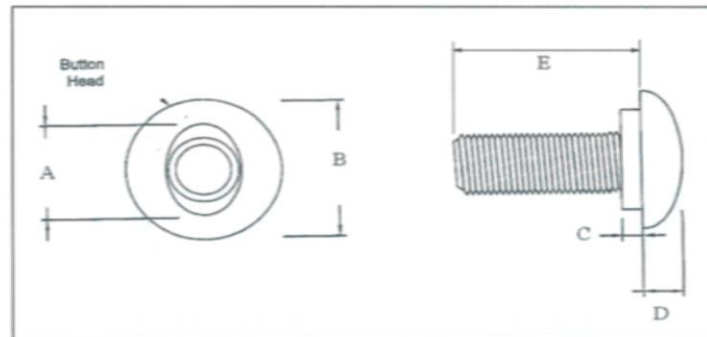


Figure 3.0 : Schematic for Post or Splice Bolt

**Guardrail :
Nut Test Report
by SIRIM QAS
International Sdn
Bhd
Report No:
2018CB0550**

SAMPLE REFERENCE : NUT

CLAUSE	REQUIREMENT	RESULTS	REMARKS
6.3.3 DIMENSIONS			
A (mm)	31.75	30.34	*
B (mm)	17.46	18.22	*
C (mm)	25.40 mm Dia x 1.59 mm deep	23.25 x 0.82	*
9.4 COATING REQUIREMENTS**			
Coating thickness (µm)	43 min.	Refer to report no. MIAS 2018-067	Pass

Note : *All dimensions are subject to manufacturer's tolerance except where allowable tolerances are shown.

** Sub-contracted.

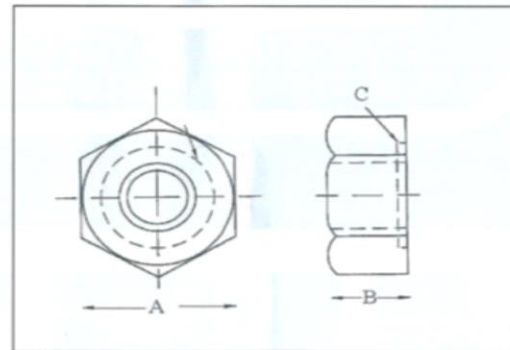


Figure 4.0 : Schematic for Nut

**Guardrail :
Beam Washer
Test Report by
SIRIM QAS
International Sdn
Bhd
Report No:
2018CB0550**

SAMPLE REFERENCE : BEAM WASHER

CLAUSE	REQUIREMENT	RESULTS	REMARKS
6.4.1 DIMENSIONS			
A (mm)	76.2	75.77	*
B (mm)	4.8	2.51	*
C (mm)	44.5	39.55	*
D (mm)	17.5 x 25.4	18.99 x 31.34	*
9.5 COATING REQUIREMENTS**			
Coating thickness (µm)	36 min.***	Refer to report no. MIAS 2018-067	Fail

Note : *All dimensions are subject to manufacturer's tolerance except where allowable tolerances are shown.

** Sub-contracted.

***Based on AASHTO Designation:M232M/M232-10, Class D (individual).

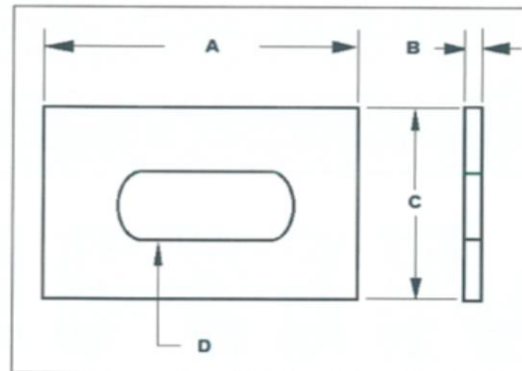


Figure 5.0 : Schematic for Washer

Optional Accessories : Anti Theft Nut



Optional Accessories :

Anti Theft Nut

Security Shear/Breakaway Nut/Anti Theft Nut

Security shear nuts, also known as breakaway nuts, snap off nuts or permanent nuts, are a premium 1-way permanent security solution ideal where maintenance is not required.

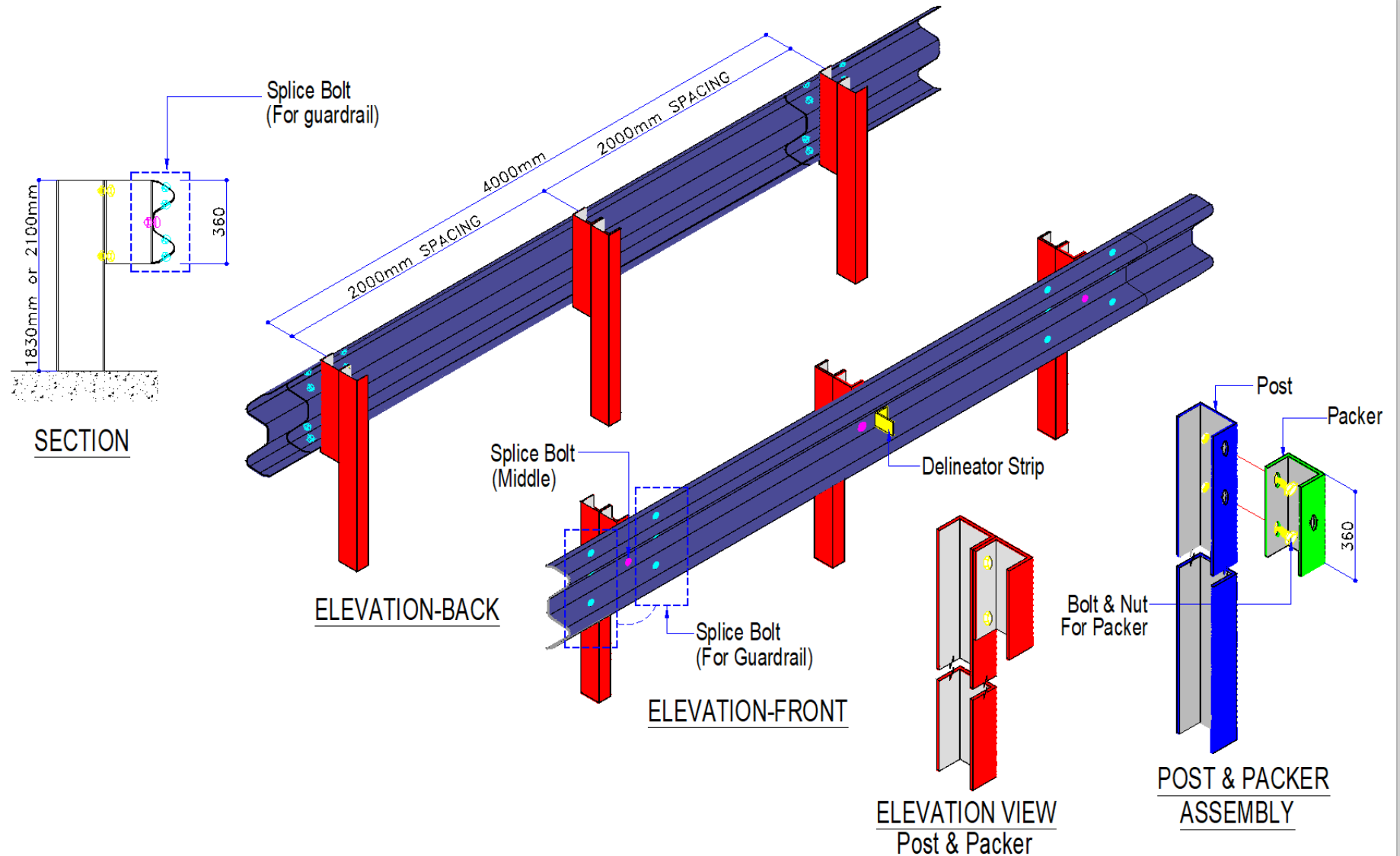
Designed to prevent unauthorised tampering or removal of equipment or facilities, breakaway nuts are typically used in public areas (schools, hospitals etc) and within the fencing industry.

- One of the best 1-way security solutions available
- Breakaway hex nut and cone shaped permanent nut
- Suitable for high torque applications
- Vibration resistant
- Tightened using standard spanner or socket

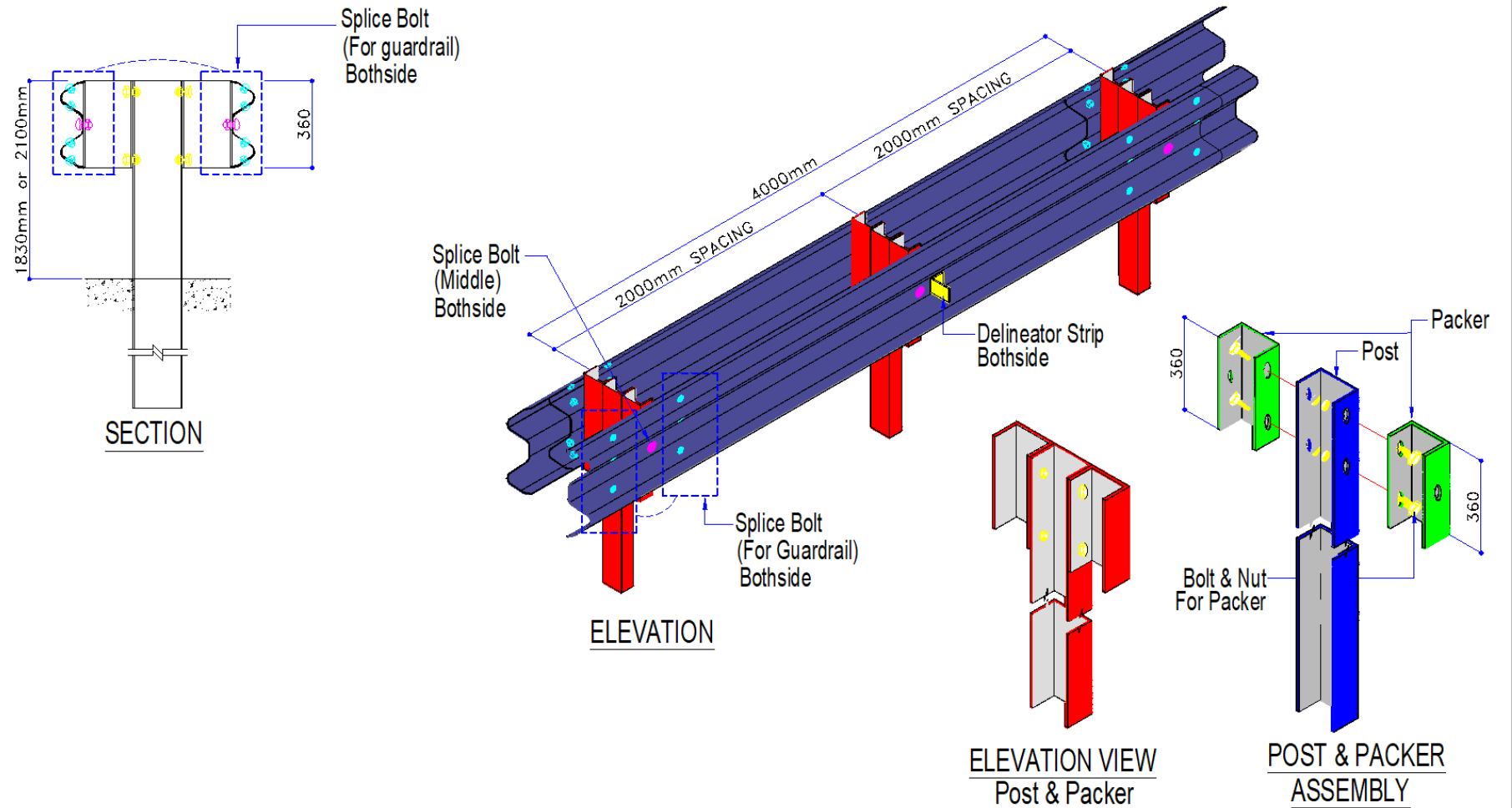
Shear Nuts (breakaway nuts) – How they work

The hexagon nut section is fully tightened with a standard spanner or socket until the pressure applied surpasses the maximum torque limit, which causes the hexagonal part of the nut to break off, leaving a plain tamper resistant cone shape which is extremely difficult to remove as there is nothing to grip.

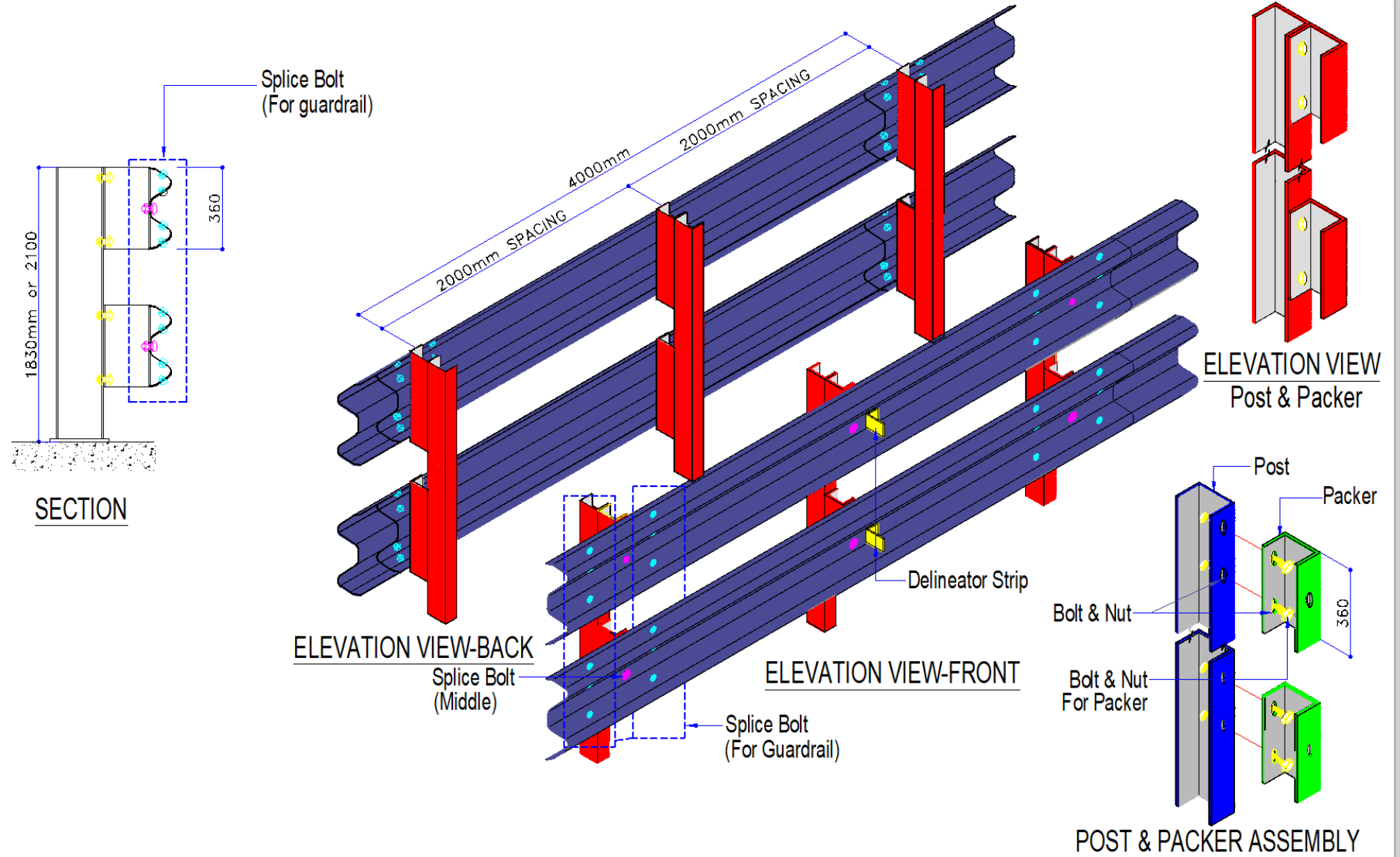
Guardrail : Single Mounted



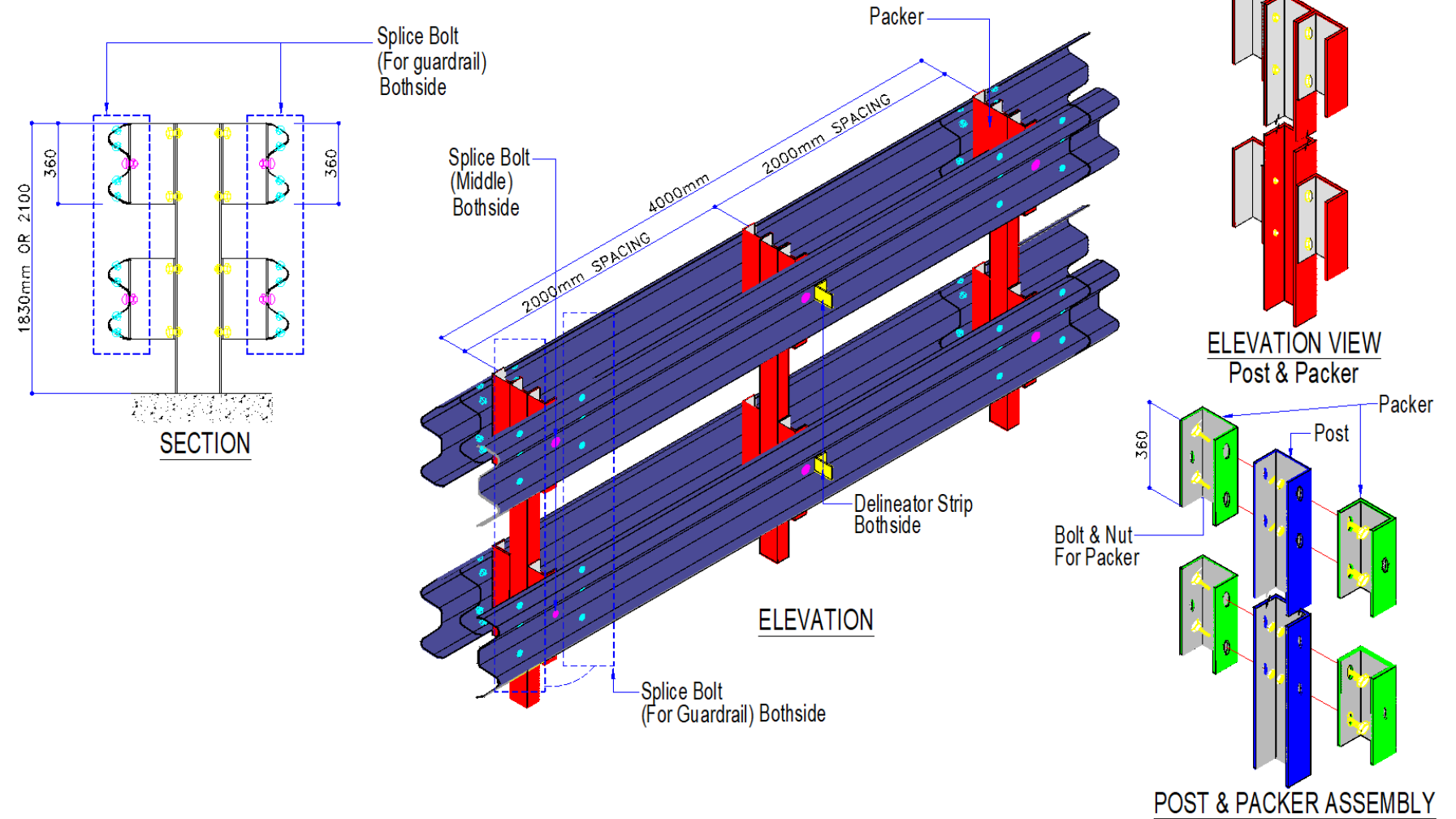
Guardrail : Double Mounted



Guardrail : Single Mounted- 2 Row



Guardrail : Double Mounted- 2 Row

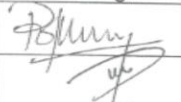



Sample Work Program

WORK PROGRAM																																												
PROPOSED UPGRADING OF EXISTING EMERGENCY MEDIAN OPENING (EMO) AT KM ... Highway...																																												
NO	TASK NAME	DURATION	START	FINISH	WEEK 1								WEEK 2								WEEK 3								WEEK 4								WEEK 5							
<i>PRILIMINARY STAGE (DOCUMENTATION)</i>																																												
1	RECEIVING LOA	35 DAYS	07.04.17	11.05.17	7.4	8.4	9.4	10.4	11.4	12.4	13.4	14.4	15.4	16.4	17.4	18.4	19.4	20.4	21.4	22.4	23.4	24.4	25.4	26.4	27.4	28.4	29.4	30.4	31.4	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	10.5					
2	WORK PROGRAM																																											
3	INSURANCE POLICY																																											
4	TMP PLANNING																																											
5	FABRICATION WORKS																																											
<i>PREPARATION RAW MATERIAL</i>																																												
6	H BEEAM CUTTING & WELDING																																											
	ACTUAL PROGRESS																																											
7	CUTTING & WELDING POST WITH STEEL PLATE																																											
	ACTUAL PROGRESS																																											
8	CUTTING & WELDING HOLLOW SECTION																																											
	ACTUAL PROGRESS																																											
9	CUTTING MAKING HOLE BASE PLATE																																											
	ACTUAL PROGRESS																																											
10	SENDING FOR GALVANIZING																																											
<i>ASSEMBLING WORK - EMO</i>																																												
11	BOLT STEEL POST & BASE PLATE																																											
12	BOLT H BEAM & STEEL PLATE																																											
13	FIXING BALANCE ROLLER																																											
14	FIXING PALLET JACK																																											
15	FIXING ALL NECESSARY ACCESSORIES.																																											
16	READY FOR TRIAL																																											
<i>INSTALLATION AT SITE</i>																																												
17	TRAFFIC MANAGEMENT																																											
18	DISMANTEL EXISTING EMO SENT TO SO																																											
19	EXCAVATE FOR FOUNDATION WORKS																																											
20	POURING CONCRETE AND CURING																																											
21	FIXING BASE PLATE																																											
22	COMPLETE THE INSTALLATION OF EMO																																											
23	FINAL ISPECTION & HAND OVER																																											

Sample Product Quality Assurance Plan

VPN (M) SDN. BHD.
formally known as VPN Marketing (M) Sdn. Bhd.
PRODUCT QUALITY PLAN

Product Types: Guardrail			Position	Name	Sign
Doc No: MR-PQP-01	Revision No: 04	Initiated by:	QMR	REVATHI	
Page : 1 of 1	10-08-2019	Approved by:	Director	ROOBAN	

PROCESS	CONTROL PARAMETERS	FREQ. OF CONTROL	REFERENCE DOCUMENT	WHO TO CONTROL	EQUIPMENT	RECORDS
Incoming Inspection	Material	5 % Every lot	QA-WI-01	Store/QC	Caliper/ Micrometer	Supplier's document Incoming Inspection Stamp
Storage	Quantity	5 % Every lot	PD-SOP-03	Store	Visual	Goods Receive Note
In-process Inspection	Dimensions	5 % Every lot	Drawing/ Work Order & Samples	Production /QC	Caliper/ Micrometer	In Process Inspection Report
Slitting	Dimension	5 % Every lot	Drawing/ Work Order & Samples	Production	Caliper/ Micrometer	In Process Inspection Report
Turret Punch	Dimension	5 % Every lot	Drawing/ Work Order & Samples	Production /QC	Caliper/ Micrometer	In Process Inspection Report
Bending	Dimensions	5 % Every lot	Drawing/ Work Order & Samples	Production	Caliper/ Micrometer & Measuring Tape	In process Inspection report
Final Inspection	Functionality Completeness /Labeling	5 % Every lot	QA-WI-01	QC	NA	Final Inspection Report
Packing	Visual/ Completeness	5 % Every lot	Shearing Line Production/In process Check List	QC	NA	Final Inspection Report

Process	Rev. No	Description	DCF No.	Effective Date	Remarks
All	00	New Release	-	15-07-2010	
All	01	Add in Sonic Steel Ind Sdn. Bhd. into scope	Pqp003/10	01-12-2010	
All	02	Add in Equipment Used in PQP	Pqp005/11	09-02-2011	
All	03	Change of Company Name from VPN Marketing (M) Sdn. Bhd. to VPN (M) Sdn. Bhd.		10-06-2018	
All	04	Add in Turret & Bending Machine in the process	Pqp015/19	10-08-2019	

UNCONTROLLED COPY

CIDB & SIRIM Certificate

CIDB Certificate



No. Perakuan : **A 002183**

**PERAKUAN PEMATUHAN STANDARD
(BAHAN BINAAN)**

Adalah dengan ini Pengilang/Pengeluar yang dinyatakan di bawah ini telah mengeluarkan bahan binaan yang diperakui oleh Lembaga mengikut Bahagian VIIA Akta Lembaga Pembangunan Industri Pembinaan Malaysia (Pindaan 2011). Perakuan ini adalah tertakluk kepada syarat-syarat yang telah ditetapkan. Perakuan ini mengesahkan bahawa bahan atau produk binaan yang dinyatakan di bawah telah diperakukan

No. Pendaftaran : 1181118SL0324

Nama Pengilang / Pengeluar : VPN (M) SDN. BHD.

Alamat Kilang Berdaftar : NO. 6 JALAN TIAJ 2/7
TAMAN INDUSTRI ALAM JAYA BANDAR PUNCAK ALAM
42300 SELANGOR

Kategori dan Jenis produk bahan binaan :
(Rujuk Lampiran A untuk butiran terperinci)

IRON AND STEEL PRODUCTS

- Corrugated Sheet Steel Beam For Highway Guardrail
- Metal Deck for Tubular Scaffolds (without hook)

Tarikh Mula Berkuatkuasa : 18-11-2018

Tarikh Tamat Tempoh Perakuan : 17-11-2019

Perakuan ini hendaklah diperbaharui selepas-lewatnya 30 hari sebelum tarikh tamat tempoh perakuan

Nota: Perakuan dikeluarkan setelah Lembaga menjalankan pemeriksaan dan pengesahan ke atas kilang dan produk-produk yang terkandung di dalam Pensijilan Produk (Product Certification) yang dikeluarkan oleh Badan Pensijilan yang diiktiraf. Pihak pengeluar/pengilang adalah bertanggungjawab untuk memastikan Pensijilan Produk (Product Certificate) sentiasa dalam tempoh sah laku.



IR. SHARIFUDIN CHE OMAR
PENGARAH
CIDB NEGERI SELANGOR
b.p Ketua Eksekutif



SIRIM Certificate



No Lesen : **PC003905**
Licence No :

LESEN PENSIJILAN BARANGAN
Product Certification Licence



SIRIM QAS International Sdn. Bhd. dengan ini menganugerahkan kepada
SIRIM QAS International Sdn. Bhd. hereby grants to

VPN (M) SDN. BHD.
NO 6, JALAN TIAJ 2/7
TAMAN INDUSTRI ALAM JAYA
42300 BANDAR PUNCAK ALAM
SELANGOR, MALAYSIA

Lesen untuk menggunakan Tanda Pensijilan di atas barangan
a licence to use the Certification Mark on
CORRUGATED SHEET STEEL BEAM FOR HIGHWAY GUARDRAIL

Please refer to detail in the SCHEDULE

sebagai mematuhi keperluan
as complying with
AASHTO M 180 : 2012



Mohd Azanuddin bin Salleh
Pengarah Urusan
Managing Director
SIRIM QAS International Sdn. Bhd.



SIRIM QAS International Sdn. Bhd.
(No. Syarikat 410234-X)
1, Persiaran Dam Marlin
Seksyen 2, Fasa 2, Jalan 7/35,
40100 Shah Alam
Selangor Darul Ehsan
MALAYSIA

Tel : 03-55444600
Fax: 03-55444606
<http://www.sirim.my>
<http://www.maqaslan-certified.my>

Tarikh Mula Pensijilan : 12 October 2018
Certified Since

Sah Sehingga : 12 October 2019
Valid Until

Tarikh Dikeluarkan : 13 December 2018
Issue Date

No Siri : 042933
Serial No

Lesen ini dianugerahkan tertakluk kepada syarat-syarat Perjanjian Pensijilan Barangan SIRIM QAS International Sdn. Bhd.
This Licence is granted subject to the provisions of the Product Certification Agreement of SIRIM QAS International Sdn. Bhd.

VPN

A member of Sonic Capital Group 2019

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Manufacturing License & ISO 9001:2015 Certificates

Manufacturing License

ASAL ORIGINAL Berang ICA 7
Form ICA 7

KEMENTERIAN PERDAGANGAN ANTARABANGSA DAN INDUSTRI MALAYSIA MINISTRY OF INTERNATIONAL TRADE AND INDUSTRY OF MALAYSIA

**AKTA PENYELARASAN PERINDUSTRIAN, 1975
LESEN PENGILANGAN
INDUSTRIAL CO-ORDINATION ACT, 1975
MANUFACTURING LICENCE**

No. Siri: A **025177** No. Lesen: **A 016275**
Serial No.: Licence No.:

PADA MENURUT AKTA PENYELARASAN PERINDUSTRIAN, 1975
IN PURSUANCE OF THE INDUSTRIAL CO-ORDINATION ACT, 1975

Saya memberi lesen kepada
I license **VPN MARKETING (M) SDN. BHD.**
(Nama pemohon/Applicant's name)


untuk bertindak sebagai PENGILANG BERLESEN mulai dari **20 Julai 2007**
to act as LICENSED MANUFACTURER as from (Tarikh/Date)

di tempat pengilangan beralamat **No. 6, Jalan TIAJ 2/7, Taman Industri Alam Jaya,**
at the place of manufacturing at
42300 Bandar Puncak Alam, Selangor Darul Ehsan

bagi keluaran yang dinyatakan di bawah ini dan tertakluk kepada syarat yang dilampirkan bersama ini:
for product(s) specified hereunder and subject to the conditions attached herewith:

Keluaran:
Product: **Menjalankan aktiviti 'Slitting & Shearing of Steel Coils' dan mengeluarkan 'Guard Rails & Accessories, Metal Fabrication Products, Roof Truss, Steel Door/Window Frames' dan 'Metal Furniture & Parts Thereof'**

Bertarikh pada **27 Ogos 2007**
Dated this


PEGAWAI PELESEN/
LICENSING OFFICER
DATO' ABDUL RAHAMAN MAMAT
Ketua Seksyen
Kementerian Perdagangan Antarabangsa & Industri
Malaysia

ISO Certificate

globalgroup
social | ethical | objective

Certificate of Registration

This is to certify that the

QUALITY MANAGEMENT SYSTEM

of

VPN MARKETING (M) SDN BHD
No. 6, Jalan TIAJ 2/7, Taman Industri Alam Jaya, Bandar Puncak Alam, Selangor, 42300, MALAYSIA

for

Processing and Fabrication of Steel Products

has been assessed and registered against the provisions of

ISO 9001:2015
International Standard

With

Registration Number: **80Q18490** Project: **2-12490-1-Q**
Certification Date: **11 May 2017** NACE: **DJ 28.52**
Recertification Due Date: **20 April 2020**

Certification Approved By:  Alan Cherry
Group Chief Executive Officer

Registration is subject to the management system being continually maintained to the above standard under regular surveillance.
Should surveillance not take place when required, registration shall be removed.
This certificate is the property of GlobalGroup of Companies Limited
21 Lansdowne Crescent, Edinburgh, Midlothian, EH12 5EH, Scotland, United Kingdom

Please validate the authenticity of the certificate at www.globalgroup.net 50001177

Picture of List Project : TNB Hydroelectric Plant, Cameron Highland, Pahang.



After Installation



After 2 years

Picture of List Project : Emergency Median Opening (EMO) , LATAR Highway, Selangor



After Installation



After 2 years



VPN

THANK YOU

QUALITY AT ALL LEVELS