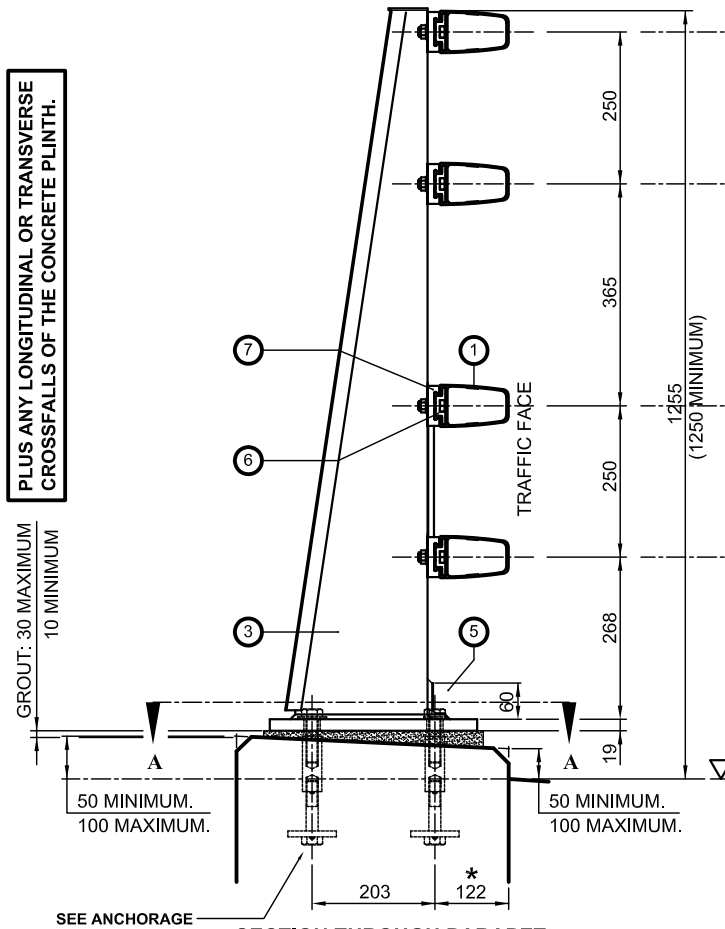
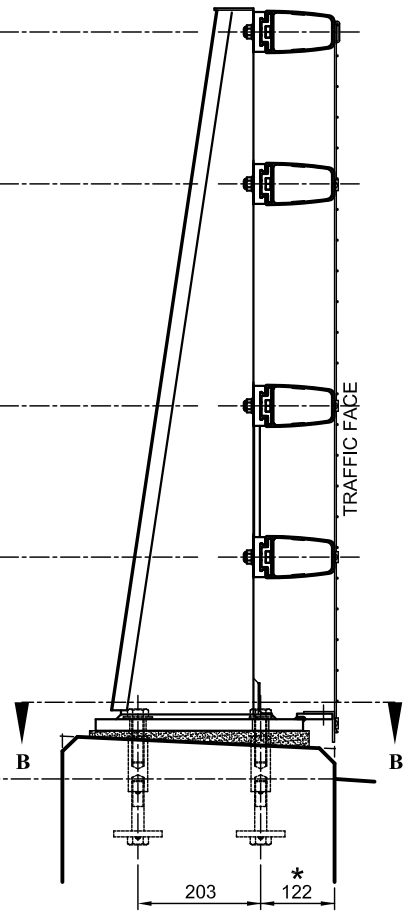
VGAN 503.

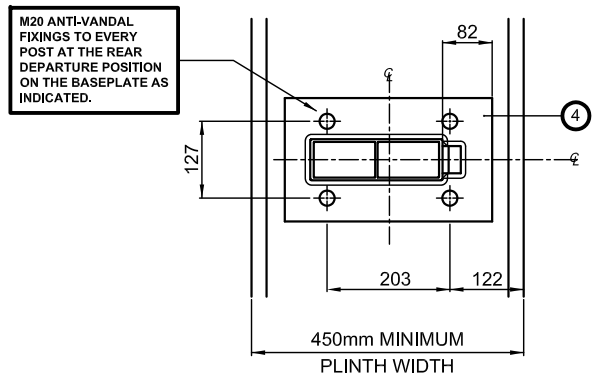


SECTION THROUGH PARAPET.

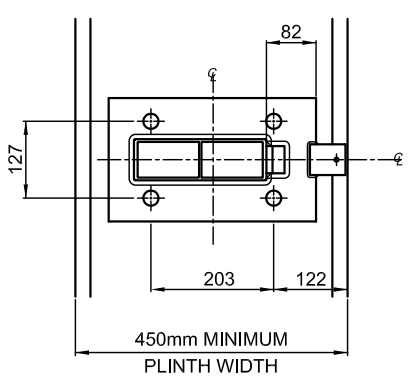
VGAN 504.



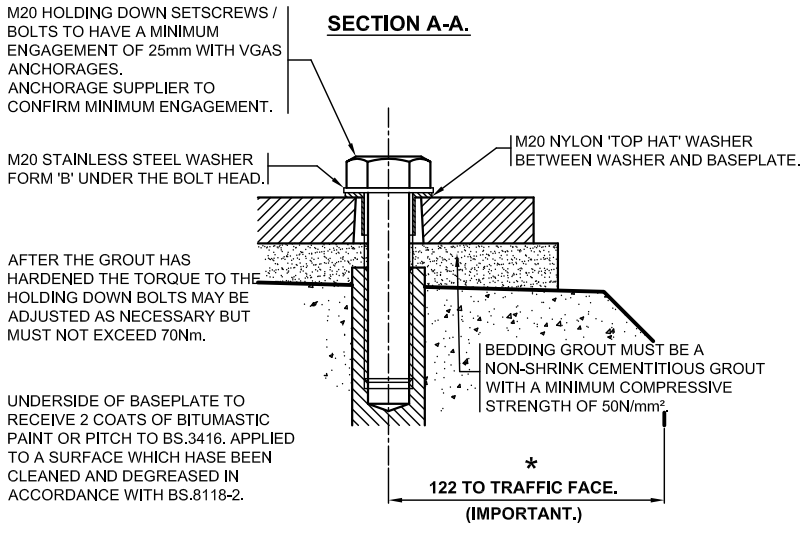
SECTION THROUGH PARAPET.



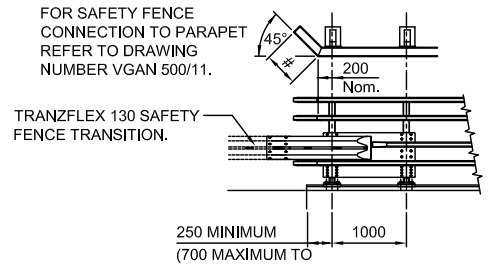
SECTION A-A.

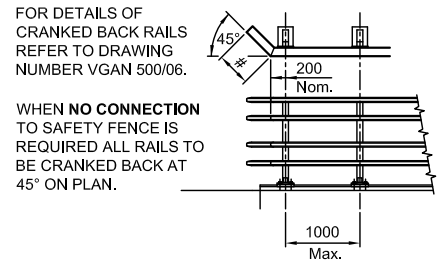


SECTION B-B.

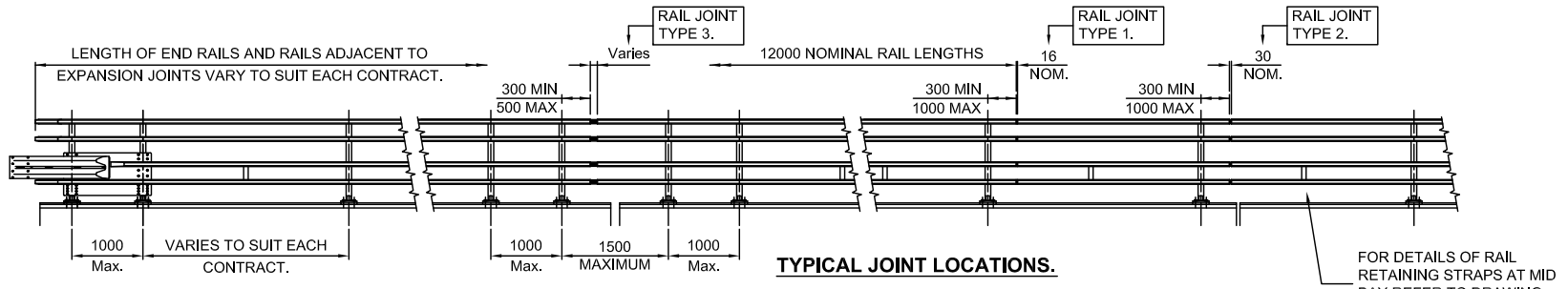


ENLARGED VIEW ON HOLDING DOWN BOLT.



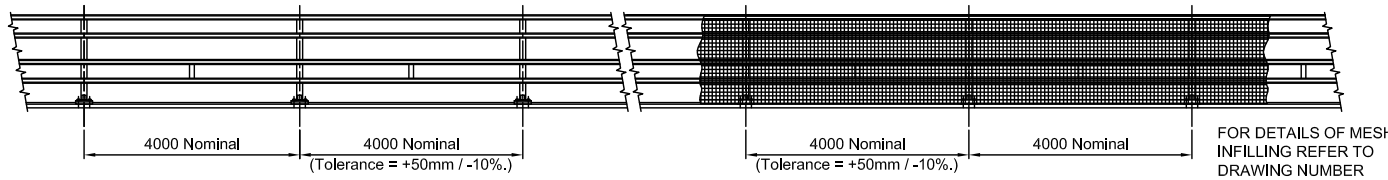


PARAPET CONNECTIONS TO SAFETY FENCE.



TYPICAL JOINT LOCATIONS.

VGAN 500 SERIES PARAPET IS A **MODULAR SYSTEM** BASED ON **4.000m POST CENTRES.** REDUCTION IN POST CENTRES DOWN TO 3.200m CENTRES CAN OCCUR ADJACENT TO NO-TENSION RAIL JOINTS TYPE 3 AND END OF PARAPET RUN ADJACENT TO TWIN INTERMEDIATE POSTS AT 1.000m CENTRES. CLOSER POST CENTRES MAY BE USED FOR SINGLE BAYS WHERE THIS CANNOT BE AVOIDED AT MOVEMENT JOINTS AND END OF PARAPET RUNS.



VGAN 503 PARAPET. **VGAN 504 PARAPET.**

GENERAL NOTES.

1/. ALL ALUMINIUM WELDING TO BE IN ACCORDANCE WITH BS.EN.1011-4.

2/. WELDERS AND WELDING PROCEDURES ARE IN ACCORDANCE WITH BS.EN.ISO.9606-2 AND BS.EN.ISO.15614-2 RESPECTIVELY.

3/. MAIN RAILS CAN BE RADIUSED TO SUIT ON SITE DOWN TO MINIMUM RADII OF 50 metres. TIGHTER RADII CAN BE SUPPLIED PREFORMED BY SPECIAL ARRANGEMENT.

4/. DIMENSIONS RELATIVE TO HEIGHT DATUM ASSUME THERE IS NO LONGITUDINAL FALL ON THE PLINTH. ADDITIONAL TOLERANCES TO TAKE ACCOUNT OF THESE FALLS ARE PERMISSIBLE.

5/. FABRICATION TO BE IN ACCORDANCE WITH BS.8118-2.

6/. AN EASILY LEGIBLE IDENTIFICATION PLATE SHALL BE APPLIED AND LOCATED NEAR TO THE TOP OF THE FIRST POST AT EACH APPROACH END IN AN EASILY VISIBLE POSITION.

MATERIAL SPECIFICATION.

ITEM	SPECIFICATION	ITEM	SPECIFICATION
MAIN RAIL.	ALL EXTRUSIONS ARE TO BE ALUMINIUM ALLOY EN AW6082 T6 IN ACCORDANCE WITH BS.EN.515, BS.EN.573-3, BS.EN.573-4, BS.EN.755-1, BS.EN.755-2, BS.EN.755-5, BS.EN.755-7 AND BS.EN.755-9. MAIN RAIL TO HAVE AN ADDITIONAL REQUIREMENT OF 10% MINIMUM ELONGATION.	BOLTS.	ALL BOLTS / SETPINS TO CONFORM TO BS.3692 AND BE STAINLESS STEEL TO BS.EN.ISO.3506-1 GRADE A4/80.
RAIL JOINT.		NUTS.	ALL NUTS TO CONFORM TO BS.3692 AND BE STAINLESS STEEL TO BS.EN.ISO.3506-2 GRADE A4.
POST SECTION.		PLAIN WASHERS.	WASHERS TO BE M20 FORM 'B' AND M12 FORM 'A' CONFORMING TO BS.4320 AND BE STAINLESS STEEL TO BS.EN.ISO.3506 GRADE A4 OR A2.
BASEPLATE.			
POST GUSSET.			
RAIL CLAMP BAR.			
RAIL CLEAT.			

VGAN 500 SERIES POST INFORMATION

UNFACTORED MOMENT OF RESISTANCE OF POST (kNm) AT UNDERSIDE OF BASEPLATE.	32.51
ULTIMATE SHEAR FORCE RESISTANCE OF POST (kN)	116.4
SIZE OF HOLDING DOWN BOLTS	M20

LIST OF ADDITIONAL REFERENCE DRAWING FOR THE VGAN 500 PARAPETS

DRAWING NUMBER	TITLE
VGAN 500 / 06.	RAIL CONNECTION DETAILS.
VGAN 500 / 07.	PARAPET POST DETAILS.
VGAN 500 / 08.	PARAPET MESHING DETAILS.
VGAN 500 / 09.	SHEETING AND MESHING DETAILS OF VGAN 510.
VGAN 500 / 10.	ANTI-ACCESS PANELLING.
VGAN 500 / 11.	CONNECTION TO SAFETY FENCE.

APPROVED ANCHORAGE UNITS

DRAWING NUMBER
VGAS/1.
VGAS/2.
VGAS/3.
OR OTHER APPROPRIATELY APPROVED CAST-IN OR DRILLED ANCHORAGE SYSTEM.

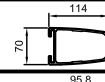
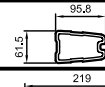
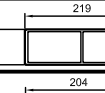
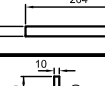
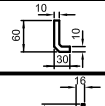
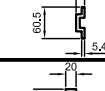
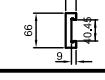
VGAN 500 SERIES PARAPET PERFORMANCE.

BS.EN.1317-1 and BS.EN.1317-2.

IMPACT TEST CRITERIA.	TB31.
CONTAINMENT LEVEL.	N1.
WORKING WIDTH.	W2. (0.8m.)
IMPACT SEVERITY LEVEL.	A.
DYNAMIC DEFLECTION.	0.6m.

ALL DIMENSIONS IN MM.

SECTION SCHEDULE

1		MAIN RAIL SECTION 38135
2		RAIL JOINT SECTION 38319
3		POST SECTION 38050
4		BASEPLATE SECTION 120502
5		GUSSET SECTION 120501
6		CLAMP BAR SECTION 38137
7		RAIL CLEAT SECTION 120095

SCALE		DATE	01/06/2006
DRN.	P.G.H.	CHK.	D.V.C.

Rev	Date	By	Description
C	Oct 12	DVC	Post Capacity corrected
B	Mar 09	DVC	Minor amendments
A	10/07	DVC	Minor amendments

MANUFACTURING TOLERANCES.

TOLERANCES AS SHOWN UNLESS STATED OTHERWISE.

DIMENSIONS.	TOLERANCES.
GREATER THAN 1000mm.	± 2mm
LESS THAN 1000mm.	± 1mm
ANGULAR DIMENSIONS.	± 0°15'

NOTE: ALL ACCUMULATIVE TOLERANCES ARE TO BE CONTAINED WITHIN THE OVERALL TOLERANCE.

SITE ERECTION TOLERANCES.

WILL VARY TO SUIT SITE CONDITIONS.

ALL STANDARDS QUOTED ARE DEEMED CURRENT AT THE DATE THE DRAWING IS ISSUED FOR APPROVAL, UNLESS OTHERWISE STATED.

THIS DRAWING TO BE USED ONLY WITH

W/O.No.

DRAWING TO BE RETURNED TO DRAWING OFFICE ON COMPLETION OF WORK

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TITLE
STANDARD ARRANGEMENT DRAWINGS OF VGAN 500 SERIES ALUMINIUM PARAPET SYSTEM.
VGAN 503 and VGAN 504.

DRAWING NUMBER
VGAN 500 - 02.C.

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