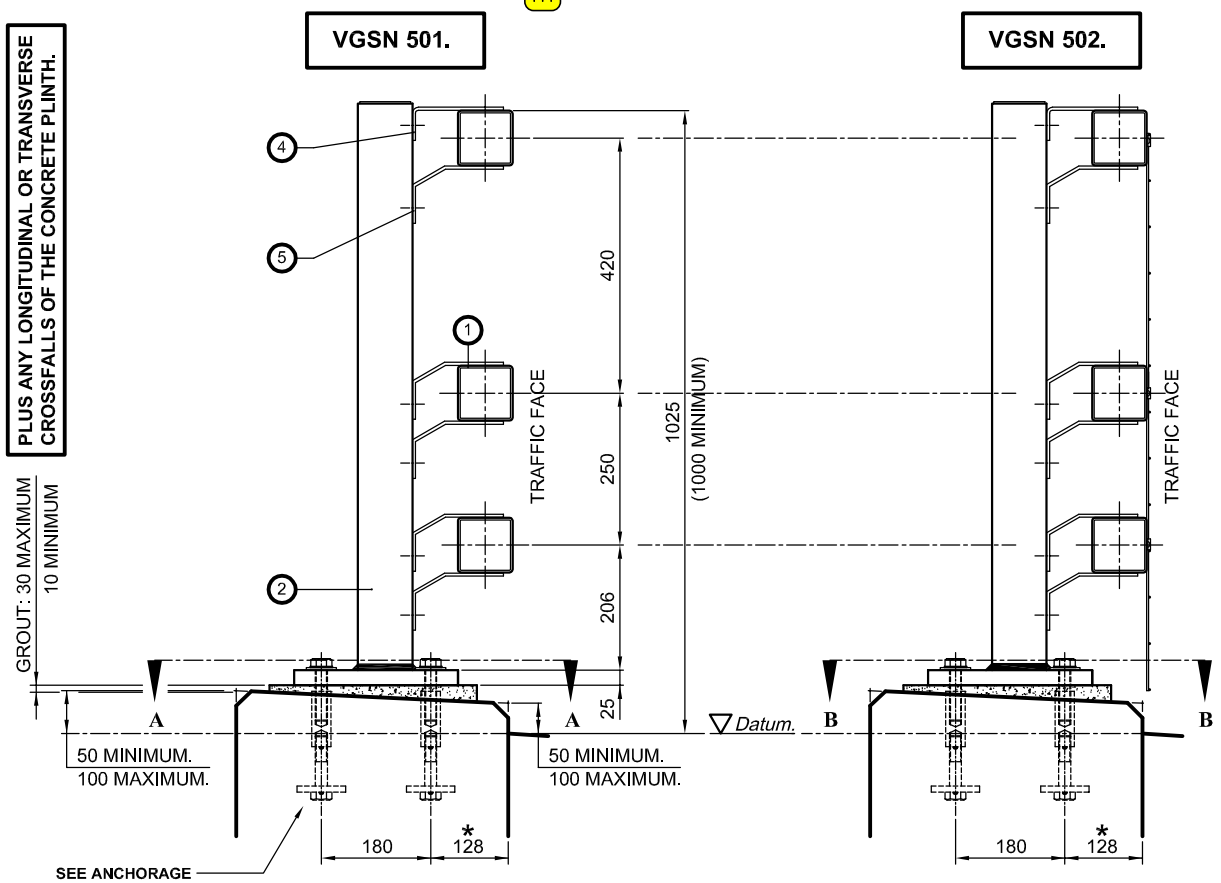
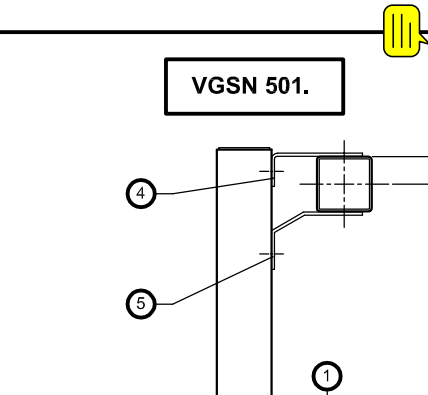
PLUS ANY LONGITUDINAL OR TRANSVERSE CROSSFALLS OF THE CONCRETE PLINTH.

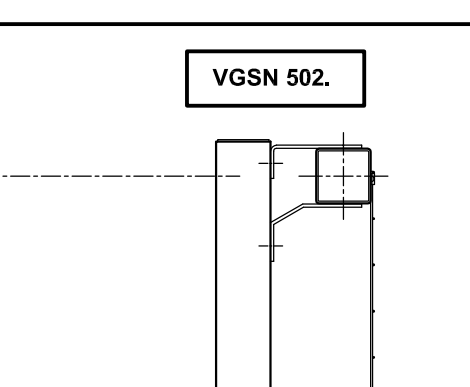


SECTION THROUGH PARAPET.

SECTION THROUGH PARAPET.



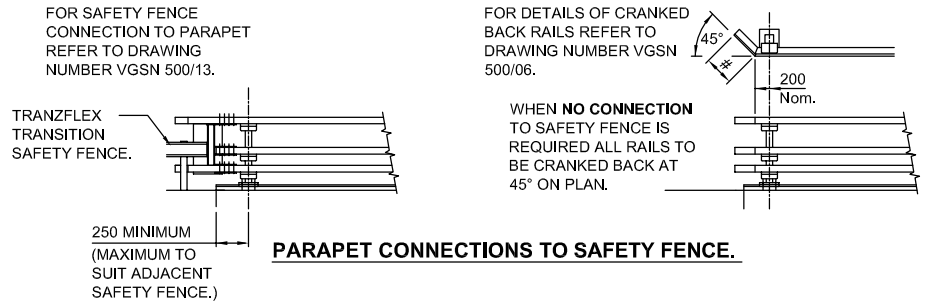
SECTION A-A.



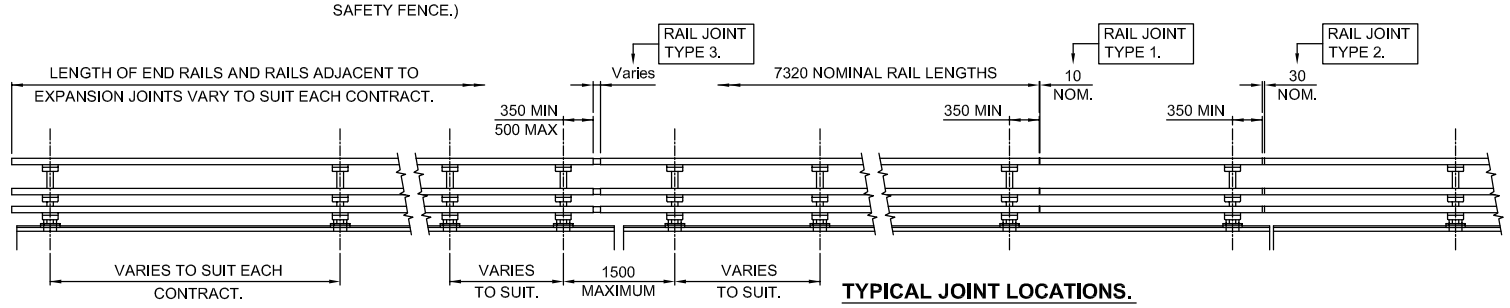
SECTION B-B.

REFER TO DRAWING NUMBER **VGSN 500/9** FOR ALTERNATIVE MESH RAIL ATTACHMENT DETAIL.

ENLARGED VIEW ON HOLDING DOWN BOLT.

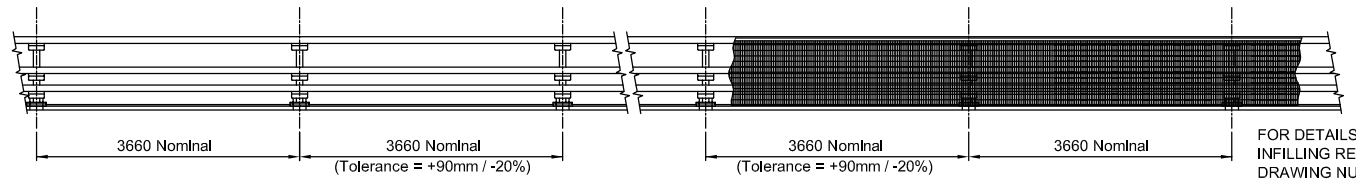


PARAPET CONNECTIONS TO SAFETY FENCE.



TYPICAL JOINT LOCATIONS.

VGSN 500 SERIES PARAPET IS A **MODULAR SYSTEM** BASED ON **3.660m POST CENTRES**. REDUCTION IN POST CENTRES DOWN TO 2.700m CENTRES CAN OCCUR ADJACENT TO NO-TENSION RAIL JOINTS TYPE 3 AND END OF PARAPET RUN ADJACENT TO END POSTS. CLOSER POST CENTRES MAY BE USED FOR SINGLE BAYS WHERE THIS CANNOT BE AVOIDED AT MOVEMENT JOINTS AND END OF PARAPET RUNS.



VGSN 501 PARAPET.

VGSN 502 PARAPET.

GENERAL NOTES.

1/. ALL STEEL WELDING TO BE IN ACCORDANCE WITH BS.EN.1011-1 AND BS.EN.1011-2.

2/. WELDERS AND WELDING PROCEDURES ARE IN ACCORDANCE WITH BS.EN.287-1 AND BS.EN.ISO.15607 RESPECTIVELY.

3/. MAIN RAILS CAN BE RADIUSED TO SUIT ON SITE DOWN TO MINIMUM RADII OF 75 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/. 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 RAILS.	ALL STEEL SECTIONS ARE TO BE IN ACCORDANCE WITH BS.EN.10025-1, BS.EN.10025-2, BS.EN.10219-1, BS.EN.10219-2. RAIL AND POST SECTIONS TO BE GRADE S275J2H, JOINTS AND POST TO RAIL CLEATS TO BE GRADE S275JO AND BASEPLATE TO BE GRADE S355J2G3.	BOLTS.	HOLDING DOWN SETPINS TO CONFORM TO BS.3692 AND BE STAINLESS STEEL TO BS.EN.ISO.3506-1 GRADE A4/80. ALL OTHER BOLTS / SETPINS TO BE GALVANISED STEEL TO CONFORM TO BS.3692 AND BS.EN.ISO.4014 GRADE 8.8.*
RAIL JOINTS.		NUTS.	ALL NUTS TO BE GALVANISED STEEL TO CONFORM TO BS.3692 AND BS.EN.ISO. 4032 GRADE 8.
POST SECTION.		WASHERS.	GALVANISED PLAIN WASHERS TO BE M20x50 o/dia. x 4mm THICK AND M16 FORM 'A' CONFORMING TO BS.4320. GALVANISED SPRING WASHERS TO BE TYPE 'A' TO BS.4464.
BASEPLATE.			
CLEAT TYPE 1.			
CLEAT TYPE 2.			

VGSN 500 SERIES POST INFORMATION

ULTIMATE UNFACTORED DESIGN MOMENT OF RESISTANCE OF POST (kNm) AT UNDERSIDE OF BASEPLATE.	14.135
ULTIMATE SHEAR FORCE RESISTANCE OF POST (kN)	142.89
SIZE OF HOLDING DOWN BOLTS	M20

LIST OF ADDITIONAL REFERENCE DRAWING FOR THE VGSN 500 PARAPETS

DRAWING NUMBER	TITLE
VGSN 500 / 06.	RAIL CONNECTION DETAILS.
VGSN 500 / 07.	PARAPET POST DETAILS.
VGSN 500 / 08.	MESHING DETAILS OPTION 1.
VGSN 500 / 09.	MESHING DETAILS OPTION 2.
VGSN 500 / 10.	SHEETING AND MESHING DETAILS OF VGSN 510.
VGSN 500 / 12.	ANTI ACCESS PANELLING.

APPROVED ANCHORAGE UNITS

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

VGSN 500 SERIES PARAPET PERFORMANCE.

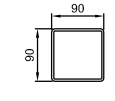
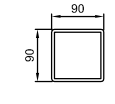
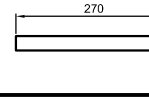
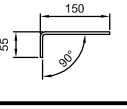
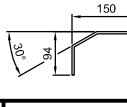
BS.EN.1317-1 and BS.EN.1317-2.

IMPACT TEST CRITERIA.	TB31.
CONTAINMENT LEVEL.	N1.
WORKING WIDTH.	W1. (0.6m.)
IMPACT SEVERITY LEVEL.	A.
DYNAMIC DEFLECTION.	0.4m.

*** ALTERNATIVE FIXINGS:**
AS A COST OPTION - IF THE PARAPET FINISH IS HOT DIPPED GALVANISED ONLY ALL FIXINGS CAN BE STAINLESS STEEL TO BS.EN.ISO.3506-1 GRADE A4/80 SUPPLIED WITH APPROPRIATE NYLON ISOLATION WASHERS.

ALL DIMENSIONS IN MM.

SECTION SCHEDULE

1		TOP MAIN RAIL SECTION 90x90x3,6 RHS.
2		POST SECTION 90x90x5 RHS
3		BASEPLATE SECTION 270x270x25
4		RAIL CLEAT TYPE 1 - 4.0mm FLAT
5		RAIL CLEAT TYPE 2 - 4.0mm FLAT

SCALE | DATE 15/05/2006
DRN. P.G.H. | CHK. D.V.C.

TITLE
STANDARD ARRANGEMENT DRAWINGS OF VGSN 500 SERIES STEEL PARAPET SYSTEM.
VGSN 501 and VGSN 502.

Rev	Date	By	Description
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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A Division of Varley & Gulliver Limited.

DRAWING NUMBER
VGSN 500 - 01.B.

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