



# Flexrail™ W-Beam Highway (12g) & Bridge Barrier (10g)



**Flexrail™** complies with the requirements of AASHTO, AS/NZS 3845 : 1999 TNZ specifications M/23 and M/17P.

CSP Pacific supplies two standard types of **Flexrail™** W-beam guardrail.

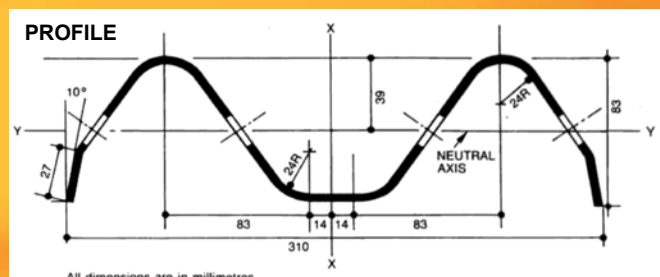
- Highway Flexrail: 3810-12
- Bridge Flexrail: 4000-10

**Flexrail™** is roll formed from coil steel and sheared to length. It is then punched, slotted and hot dip galvanised in accordance with the appropriate standards.

**Flexrail™** is generally available ex-stock in standard net lengths of 3.81 metres and 1.905 metres for highway rail and 4.00 metres and 2.00 metres for bridge rail.

#### PHYSICAL PROPERTIES

	Highway (12g)	Bridge (10g)
<b>Effective Cover</b>	3810	4000
<b>Steel Thickness (mm)</b>	2.7	3.4
<b>Area of Cross Section (mm<sup>2</sup>)</b>	1350	1640
<b>Section Modulus (mm<sup>3</sup>)</b>	Major 80,000	Major 103,000
	Minor 22,000	Minor 29,000
<b>Mass (kg per metre)</b>	11.3	13.4



For more information contact CSP Pacific on  
**Ph 0800 655 200** or visit [www.csppacific.co.nz](http://www.csppacific.co.nz)

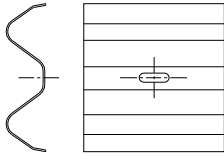
November 2008

**Product Info**

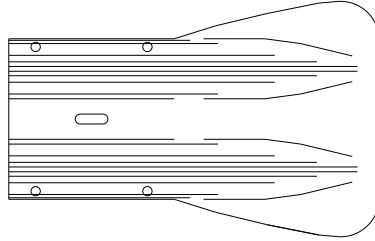


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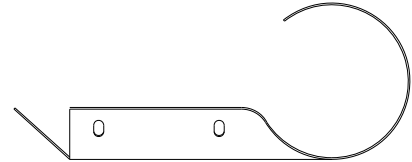
**Backing Piece**  
(used on steel blockouts only)



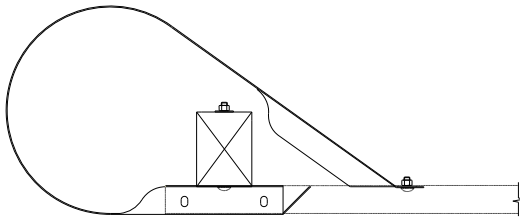
**Fish Tail**



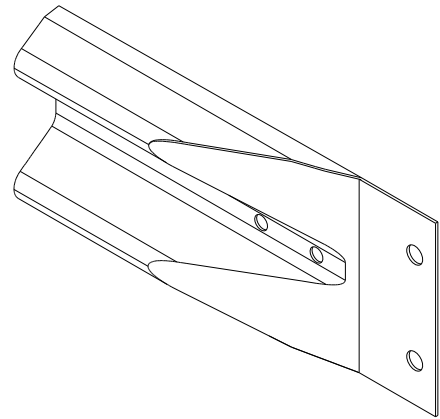
**Rolled End Fitting**



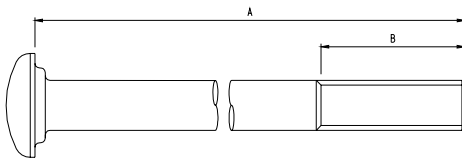
**Bullnose End Fitting**



**Structure Connector**

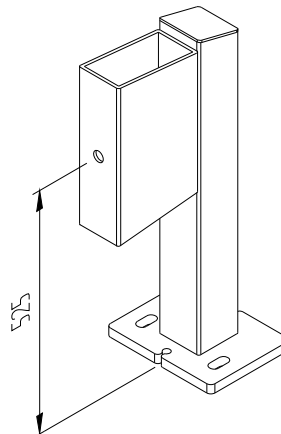


**Post Bolt**

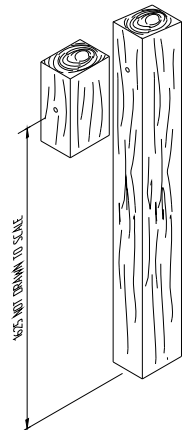


Bolt Size	A mm	B mm
250	25	120
350	350	80
450	450	120

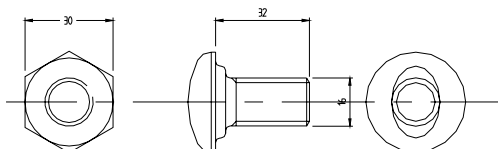
**Steel Post**



**Wooden Post**



**Splice Bolt**

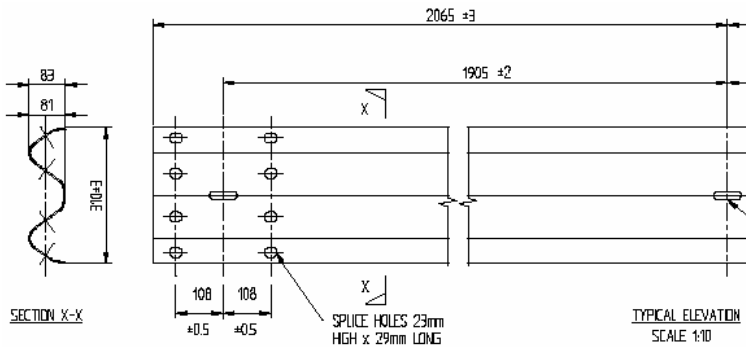


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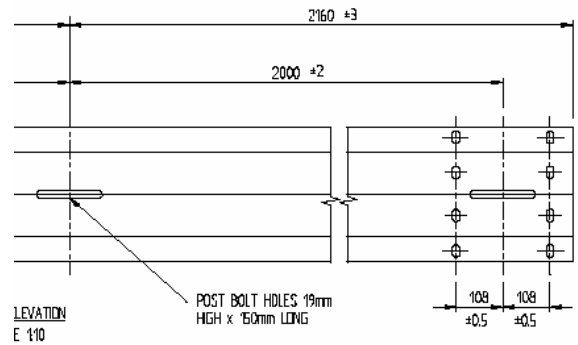


# Flexrail™ W-Beam Curved

Highway Rail (2.7mm Gauge)



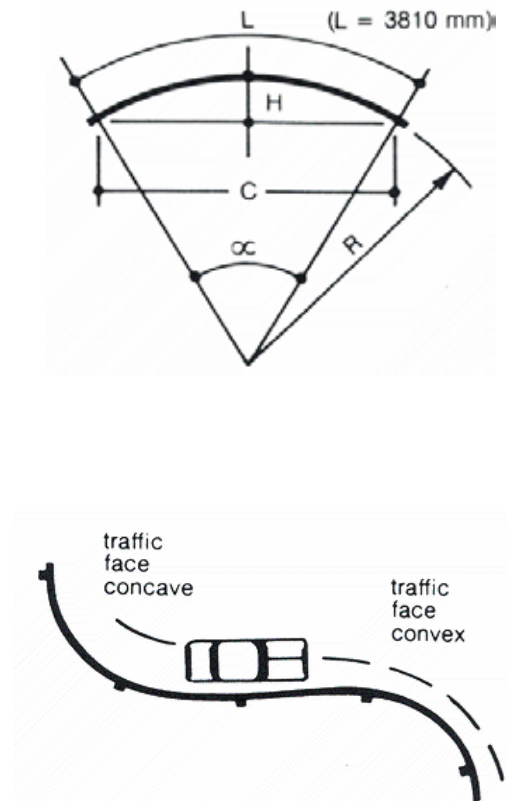
Bridge Rail Dimensions (3.4mm Gauge)



**Curved Flexrail™**

The standard straight section will align to give a smooth transition on curves with a radius greater than 45m. Pre-curved **Flexrail™** is required for tighter radii and may be curved to traffic face concave or convex. NB: Only Highway Flexrail is available pre-curved.

Highway Rail			
R (metres)	α (Deg)	C (m)	H (mm)
3	72.7656	3.559	585
4	54.5742	3.667	445
5	43.6594	3.719	359
6	36.3828	3.746	300
7	31.1853	3.763	258
8	27.2871	3.774	226
9	24.2552	3.782	201
10	21.8297	3.787	181
12	18.1914	3.794	151
14	15.5926	3.798	129
16	13.6436	3.801	113
20	10.9148	3.804	91
23	9.4912	3.806	79
29	7.5275	3.807	63
32	6.8218	3.808	57
35	6.2371	3.806	52
41	5.3243	3.809	44
46	4.7456	3.809	39



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	Y/N	Y/N
Assembly and installation is to be generally in accordance with AS/NZS 3845:1999, TNZ M23 and CSP Pacific drawing FX360.		
The rail height (top) is in accordance with the plans (706mm above the edge of the shoulder or the ground line).		
Grading of ground surface.		
Correct lapping of rail to prevent snagging.		
Blocks nailed to prevent rotation.		
Alignment and level.		
Post compaction, alignment, spacing.		

Location:			
Installed by:		Date:	
Inspected by:		Date:	

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**Installation Checklist**  
 November 2008