



Tertu

TimberRail

Timber-clad Vehicle Restraint System



Tertu TimberRail: A Vehicle Restraint System with Style

Our Tertu TimberRail range of vehicle restraint systems draws on four decades of innovation and technical expertise. At Highway Care, we supply the full Tertu TimberRail range and have a network of quality assured installers to support your project.

Tertu TimberRail is internationally recognised as a sustainable road safety solution that complies with the regulatory requirements while providing a natural aesthetic that enhances a variety of environments; from National Parks and scenic routes, through to housing developments and hospitality estates.

Highway Care has the technical expertise to guide you through the specification and installation requirements for your Tertu TimberRail project, helping you deliver a compliant and attractive vehicle restraint system.



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EN 1317 Standard

Containment levels defined by the European standard EN 1317

Containment level	Test	Speed of impact (km/h)	Angle of impact (°)	Total weight of vehicle (kg)	Kinetic energy (kj)	Recommended level of use
T1	TB 21	80 km/h	8°	1300 kg	6.2 kj	Temporary Barriers
T2	TB 22	80 km/h	15°	1300kg	21.5 kj	
T3	TB 41 TB 21	70 km/h 80 km/h	8°	10 000kg 1300kg	36.6 kj 6.2 k	
N1	TB 31	80 km/h	20°	1500kg	43.3 kj	Normal containment
N2	TB 32 TB 11	110 km/h 100 km/h	20°	1500kg 900kg	81.9 kj 40.6 kj	
H1	TB42 TB11	70 km/h 100 km/h	15° 20°	10 000kg 900kg	126.6 kj 40.6 kj	High Containment
L1	TB 42 TB 32 TB 11	70 km/h 110 km/h 100 km/h	15° 20° 20°	10 000kg 1500kg 900kg	126.6 kj 81.9 kj 40.6 kj	
H2	TB 51 TB 11	70 km/h 100 km/h	20°	13 000kg 900kg	287.6 kj 40.6 kj	
L2	TB 51 TB 32 TB 11	70 km/h 110 km/h 100 km/h	20°	13 000kg 1500kg 900kg	287.6 kj 81.9 kj 40.6 kj	
H3	TB 61 TB 11	65 km/h 100 km/h	20°	16 000kg 900kg	462.1 kj 40.6 kj	
L3	TB 61 TB 32 TB 11	80 km/h 110 km/h 100 km/h	20°	16 000kg 1500kg 900kg	462.1 kj 81.9 kj 40.6 kj	
H4a	TB 71 TB 11	65 km/h 100 km/h	20°	30 000kg 900kg	572 kj 40.6 kj	Very High Containment
H4b	TB 81 TB 11	65 km/h 100 km/h	20°	38 000kg 900kg	724.6 kj 40.6 kj	
L4a	TB 71 TB 32 TB 11	65 km/h 110 km/h 100 km/h	20°	30 000kg 1500kg 900kg	572 kj 81.9 kj 40.6 kj	
L4b	TB 81 TB 32 TB 11	65 km/h 110 km/h 100 km/h	20°	38 000kg 1500kg 900kg	724.6 kj 81.9 kj 40.6 kj	

Index (ASI)

Severity of an Impact level	ASI Index value	THIV
A	$ASI \leq 1.0$	THIV ≤ 33 km/h
B	$ASI \leq 1.4$	
C	$ASI \leq 1.9$	

The severity of an impact for vehicle occupants is estimated using the ASI and THIV* indices. Based on the values of these two indices, three levels of impact severity (A, B and C) are defined in standard EN 1317-2.

Impact severity level A offers a higher level of safety for occupants of a vehicle in distress than level B, which offers a higher level than level C.

* Theoretical head impact velocity (THIV)

Normalised Working Width

Working Width (W) can be defined as the maximum lateral distance between any part of a safety barrier on the undeformed traffic side, and the maximum dynamic position of any part of the barrier during impact testing to EN 1317-2. For designers, it is the amount of clear space required for the barrier to be installed and operated free of obstacles. The working width is divided into 8 classes from W1 to W8.

Working Width Classes	Normalised Working Width Value (W), in metres
Wn1	$Wn1 \leq 0.6$
Wn2	$0.6 < Wn2 \leq 0.8$
Wn3	$0.8 < Wn3 \leq 1.0$
Wn4	$1.0 < Wn4 \leq 1.3$
Wn5	$1.3 < Wn5 \leq 1.7$
Wn6	$1.7 < Wn6 \leq 2.1$
Wn7	$2.1 < Wn7 \leq 2.5$
Wn8	$2.5 < Wn8 \leq 3.5$

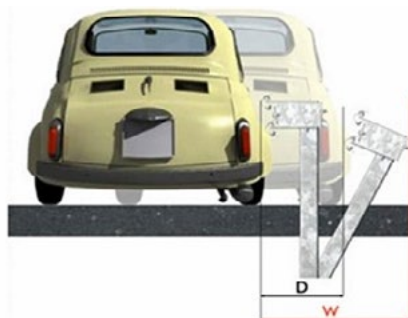


Normalised Dynamic Deflection

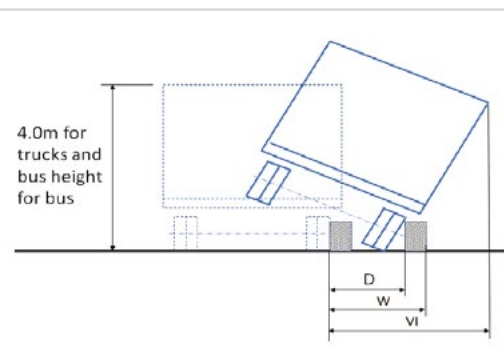
Dynamic deflection (D) is the maximum lateral dynamic displacement of any point of the traffic face of the vehicle restraint system, typically measured in metres.

Vehicle Intrusion

The vehicle intrusion of a Heavy Goods Vehicle (HGV) is the maximum dynamic lateral position from the undeformed traffic side of the barrier in consideration of a notional load having the width and length of the vehicle platform, and a total height of 4m. The vehicle intrusion of a bus is the maximum dynamic lateral position of the bus from the undeformed traffic side of the barrier. The vehicle intrusion is divided into 9 classes from VI1 to VI9.



Class	Vehicle Intrusion (M)
VI1	$VI_N \leq 0.6$
VI2	$VI_N \leq 0.8$
VI3	$VI_N \leq 1.0$
VI4	$VI_N \leq 1.3$
VI5	$VI_N \leq 1.7$
VI6	$VI_N \leq 2.1$
VI7	$VI_N \leq 2.5$
VI8	$VI_N \leq 3.5$
VI9	$VI_N \leq 3.5$



Model	Post spacing (M)	Containment Level (N)	Standardised Working Width (Wn)	Severity (ASI)	Standardised Dynamic Deflection (Dn)	CE Certificate
T18 4MS2	2m	N1 N2	W3 (1.0m) W5 (1.7m)	A	0.8m 1.5m	1826 CPR 09 02 06 DR3
T32 1M33	1.33m	N2	W2 (0.7m)	B	0.6m	0497 CPR 5906
T32 4MS2	2m	N2	W2 (0.8m)	B	0.7m	0497 CPR 5906
T32 2M66	2.66m	N2	W3 (0.9m)	B	0.8m	0497 CPR 5906
TM18 4MS2	2m	N2	W4 (1.3m)	A	1.1m	1826 CPR 09 02 06 DR8
T22 4MS2	2m	N2	W4 (1.3m)	A	1.0m	1826 CPR 09 02 06 DR7
T22 4MS2 BP	2m	N1 N2	W2 (0.8m) W4 (1.2m)	A	0.5m 1.0m	1826 CPR 06 DR13
T22 4MS2 MPS	2m	N2	W4 (1.3m)	A	1.3m	1826 CPR 06 DR14
TR18 4MS2	2m	N2	W5 (1.7m)	A	1.5m	1826 CPR 09 02 06 DR11
TM18 4M	2m	N2	W5 (1.7m)	A	1.2m	1826 CPR 09 02 06 DR06
T22 4M	4m	N2	W6 (1.9m)	A	1.8m	1826 CPR 09 02 06 DR5
T18 4M	4m	N1 N2	W4 (1.2m) W7 (2.5m)	A	1.0m 2.4m	1826 CPR 09 02 06 DR4
TR18 4M	4m	N2	W7 (2.5m)	A	2.4m	1826 CPR 09 02 06 DR12
TM40 4MS2	2m	H2	W5 (1.6m)	A	1.5m	1826 CPR 09 02 06 DR10
T40 4MS2 BP	2m	H2	W5 (1.4m)	B	1.3m	1826 CPR 09 02 06 DR2
T40 4MS2	2m	L2= N2+H2	W3 (1.0m) – N2 W4 (1.2) – H2	B	0.5m (N2) 0.8m (H2)	1826 CPR 09 02 06 DR1

Douglas Fir

Douglas Fir is a fast-growing, renewable, natural material that provides high quality timber. Its heartwood accounts for more than 80% of its composition, and is naturally durable, with excellent resistance to insects and fungi.



It is this durable heartwood, that is used to make the Tertu TimberRail vehicle restraint system, ensuring robust installations that are resistant to water absorption and degradation for an extended service life.

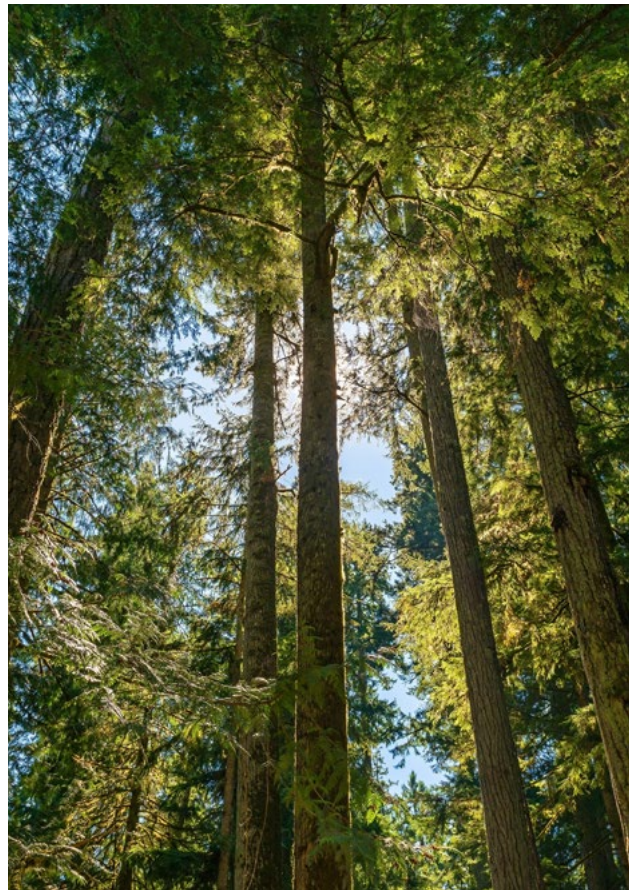
- Resistance to attacks by fungi and insects
- Naturally anti-rot
- Impervious to moisture absorption

Sustainable forest management and quality wood products play a critical role in helping us adapt to the challenges of climate change. On average, a tree absorbs between 10 and 30kg of CO² per year, much of which is captured while they are growing. This is released into the atmosphere as oxygen thanks to very active photosynthesis. Managed forestry allows mature trees to be harvested and replanted to make way for a new generation of plants.

The CO² stored remains in the tree, even when it is removed and transformed, so 1m³ of timber represents around 1 tonne of stored CO².

Tertu TimberRail has been PEFC certified since 2008, underpinning a commitment to environmentally-friendly practices and sustainability throughout the timber supply chain. PEFC certification imposes sustainable forest management standards, ensuring forest areas are conserved for future generations, while meeting our needs and overcoming challenges today.

The timber products manufactured by Tertu are pressure treated after machining in an autoclave in accordance with standard EN-335.



System Profile

T18 4M & 4MS2

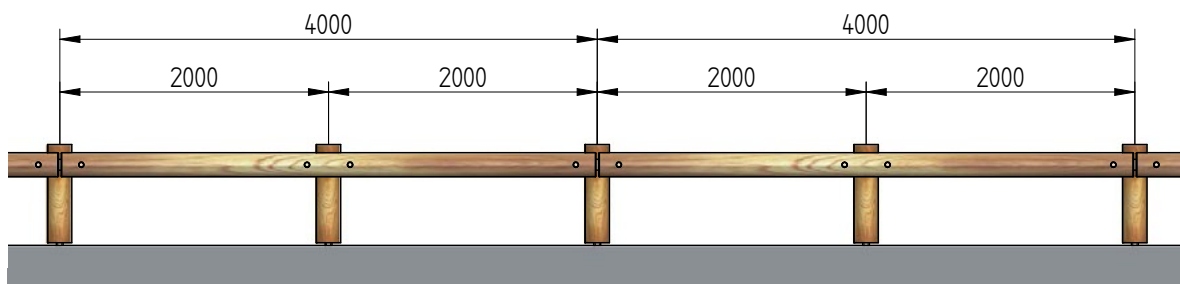
- Double containment level: N1 & N2
- 4m or 2m post spacing
- ASI A



T18 4M N1W4 - N2W7 ASI A T18 4MS2 N1W3 - N2W5 ASI A

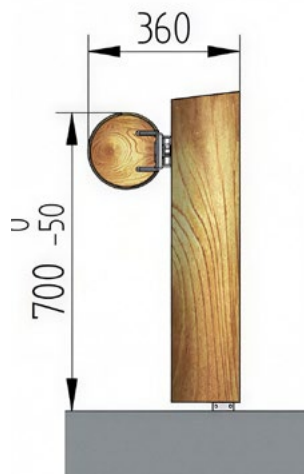


T18 4M: CE n° 1826 CPR 09 02 06 DR4
T18 4MS2: CE n° 1826 CPR 09 02 06 DR3
Notified body: Ascquer



Technical Information

- Rail made of a round log, diameter 18 cm, length 4 m, backed with a steel U-profile inserted in the wooden rail
- C100 steel post with 4 m spacing (or 2 m spacing), with wooden cladding
- Pressure-tested wood with chromium and arsenic-free preservatives
- Standard minimum curvature is ≥ 20 metres. For tighter radius smaller post spacing and beams may be required - contact Highway Care for guidance



Testing Conditions:

Containment level	Crash test criteria				Kinetic energy	Recommended level of use
	Test	Speed of impact	Angle of impact	Total weight of vehicle		
N1	TB 31	80km/h	20°	1500kg	43.3kj	Normal containment
N2	TB 32	110km/h	20°	1500kg	81.9kj	Normal containment
	TB 11	100km/h	20°	900kg	40.6kj	

Model	Containment level	Standardised working width (Wn)	Standardised dynamic deflection (Dn)	Severity Class (ASI)	Minimum Length recommended
T18 4M	N1	W4 (1.2m)	1.0m	A (≤ 1.0)	60ml + (2*4ml)
T18 4MS2	N1	W3 (1.0m)	0.8m	A (≤ 1.0)	60ml + (2*4ml)
T18 4M	N2	W7 (2.5m)	2.4m	A (≤ 1.0)	60ml + (2*4ml)
T18 4MS2	N2	W5 (1.7m)	1.5m	A (≤ 1.0)	60ml + (2*4ml)

System Profile

TR18 4M & 4MS2

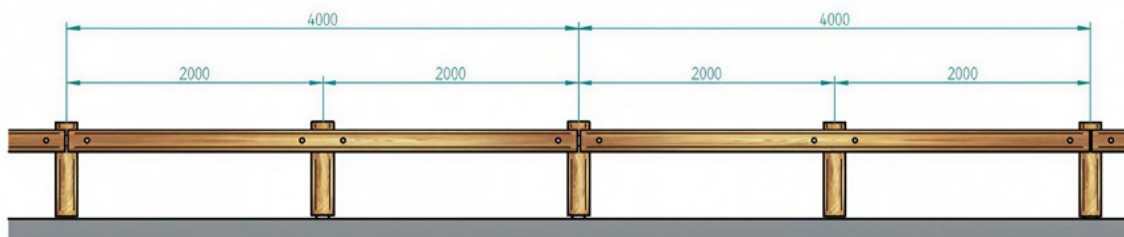
- Containment level: N2
- 4m or 2m post spacing
- ASI A



TR18 4M N2W7 ASI A TR18 4MS2 N2W5 ASI A

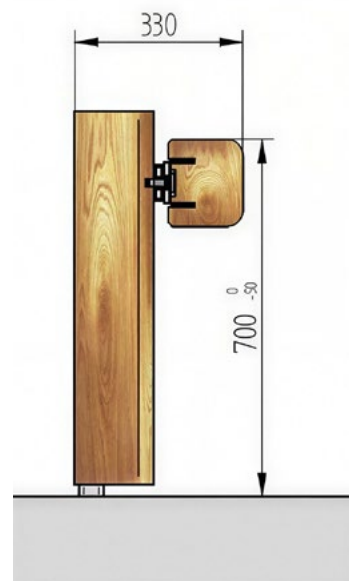


TR18 4M: CE n° 1826 CPR 09 02 06 DR12
TR18 4MS2: CE n° 1826 CPR 09 02 06 DR11
Notified body: Ascquer



Technical Information:

- Square rail with sections of 170 × 145mm, 4m length backed with a steel U profile inserted in the wooden rail
- C100 steel post with 4m spacing (or 2m spacing), with a wooden square spacer 170×180×730mm
- Pressure-tested wood with chromium and arsenic-free preservatives
- Standard minimum curvature is ≥20 metres. For tighter radius, smaller post spacing and beams may be required - contact Highway Care for guidance



Testing Conditions:

Containment level	Crash test criteria				Kinetic energy	Recommended level of use
	Test	Speed of impact	Angle of impact	Total weight of vehicle		
N2	TB 32	110km/h	20°	1500kg	81.9 kj	Normal containment
	TB 11	100km/h	20°	900kg	40.6 kj	

Model	Containment level	Standardised working width (Wn)	Standardised dynamic deflection (Dn)	Severity Class (ASI)	Minimum Length recommended
TR18 4M	N2	W7 (2.5m)	2.3m	A (≤1.0)	60ml + (2*4ml)
TR18 4MS2	N2	W5 (1.7m)	1.5m	A (≤1.0)	60ml + (2*4ml)

System Profile

T22 4M & 4MS2

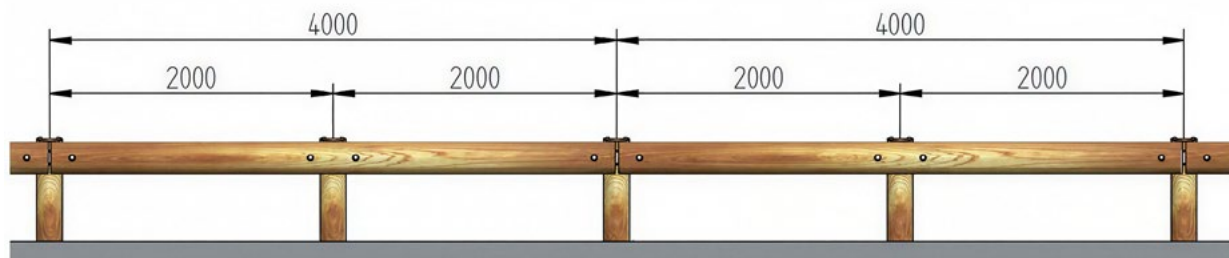
- Containment level: N2
- 4m or 2m post spacing
- ASI A



T22 4M N2W6 ASI A T22 4MS2 N2W4 ASI A

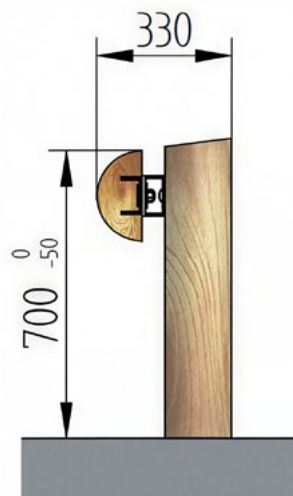


T22 4M: CE No. 1826 CPR 090206DRS
T22 4MS2: CE No. 1826 CPR 090206DR7
Notified body: Ascquer



Technical Information

- Rail made of half round log diameter 22cm, length 4m (or 2m), backed with a steel U profile inserted in the wooden rail
- C100 posts with 4m spacing (or 2m spacing), with a wooden spacer diameter 18cm
- Pressure-tested wood with chromium and arsenic-free preservatives
- Standard minimum curvature is ≥ 20 metres. For tighter radius, smaller post spacing and beams may be required - contact Highway Care for guidance



Testing Conditions:

Containment level	Crash test criteria				Kinetic energy	Recommended level of use
	Test	Speed of impact	Angle of impact	Total weight of vehicle		
N2	TB 32	110km/h	20°	1500kg	81.9 kj	Normal containment
	TB 11	100km/h	20°	900kg	40.6 kj	

Model	Containment level	Standardised working width (Wn)	Standardised dynamic deflection (Dn)	Severity Class (ASI)	Minimum Length recommended
T22 4M	N2	W6 (1.9m)	1.8m	A (≤ 1.0)	72ml + (2*4ml)
T22 4MS2	N2	W4 (1.3m)	1.0m	A (≤ 1.0)	72ml + (2*4ml)

System Profile

T22 4MS2 MPS

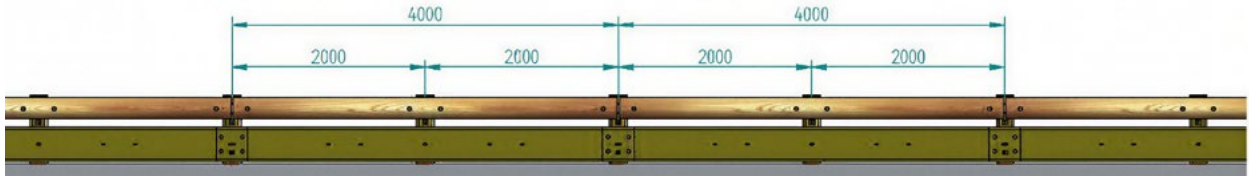
- Containment level: N2
- Crash-tested with motorcyclist protection system
- ASI A



T22 4MS2 SPM N2W4 ASI A

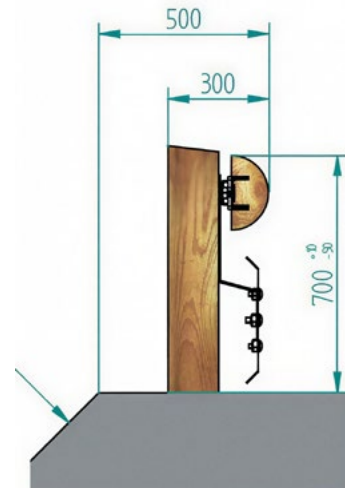


T22 4MS2: CE No. 1826-CPR-06-DR14
Notified body: Ascquer



Technical Information

- Rail made of half round log diameter 22cm, backed with a steel U profile inserted in the wooden rail
- C100 post with 4m spacing (or 2m spacing), with a wooden spacer diameter of 18cm
- Pressure-tested wood with chromium and arsenic-free preservatives
- Motorcyclist Protection System Rail – length 4.32m – height 0.37m
- Standard minimum curvature is ≥ 20 metres. For tighter radius smaller post spacing and beams may be required - contact Highway Care for guidance.



Testing Conditions:

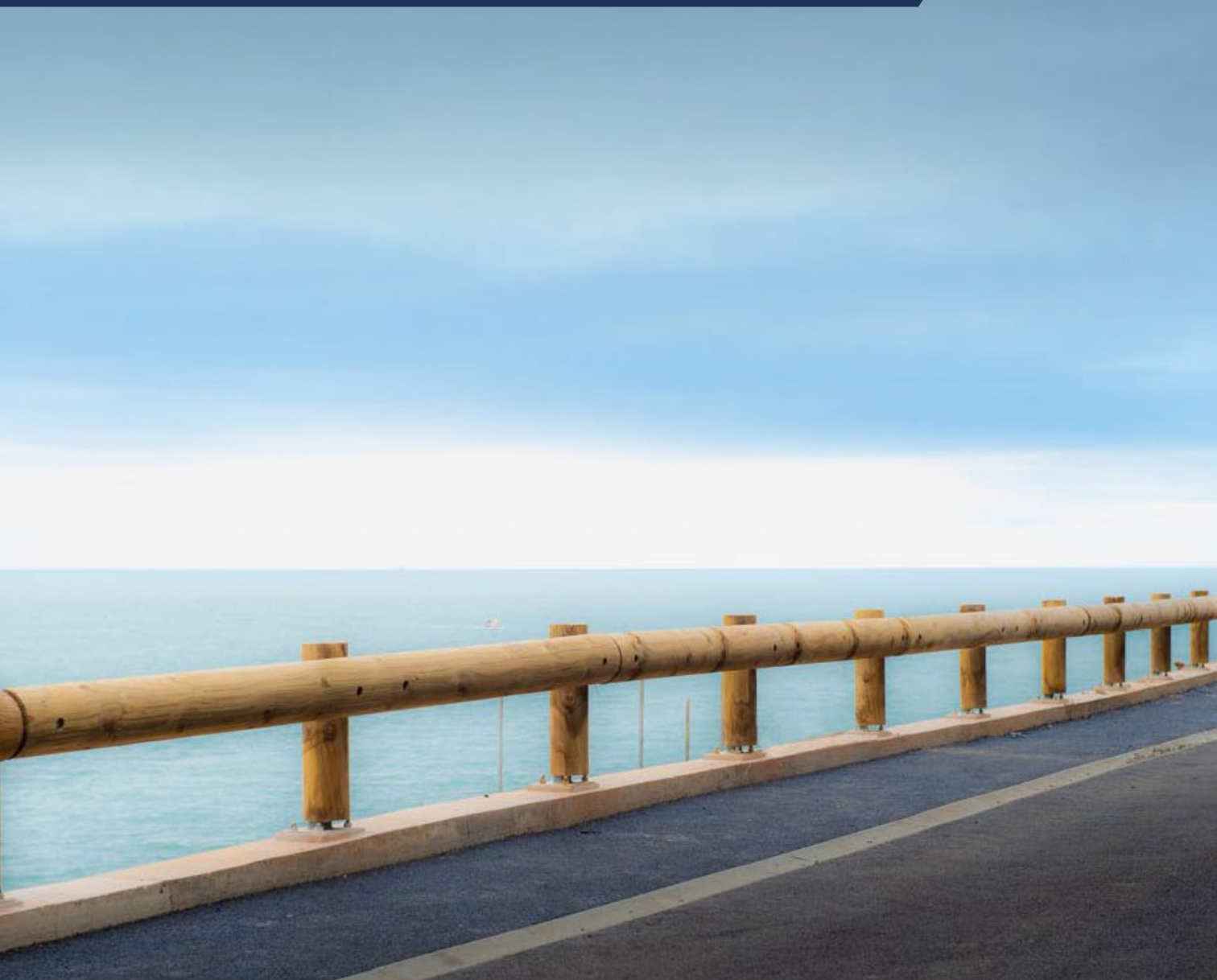
Containment level	Crash test criteria				Kinetic energy	Recommended level of use
	Test	Speed of impact	Angle of impact	Total weight of vehicle		
N2	TB 32	110km/h	20°	1500kg	81.9 kj	Normal containment
	TB 11	100km/h	20°	900kg	40.6 kj	
Model	Containment level	Standardised working width (Wn)	Standardised dynamic deflection (Dn)	Severity Class (ASI)	Minimum Length recommended	
T22 4MS2 MPS	N2	W4 (1.3m)	1.3m	A (≤1.0)	72ml + (2*4ml)	

The Tertu TimberRail timber-clad steel vehicle restraint system crash tested with motorcycle protection system has successfully completed 2 impact tests (TB11 and TB32) in accordance with EN 1317-2. Tested with a rear slope located 50 cm from its front edge (see section above).

System Profile

T22 4MS2 BP

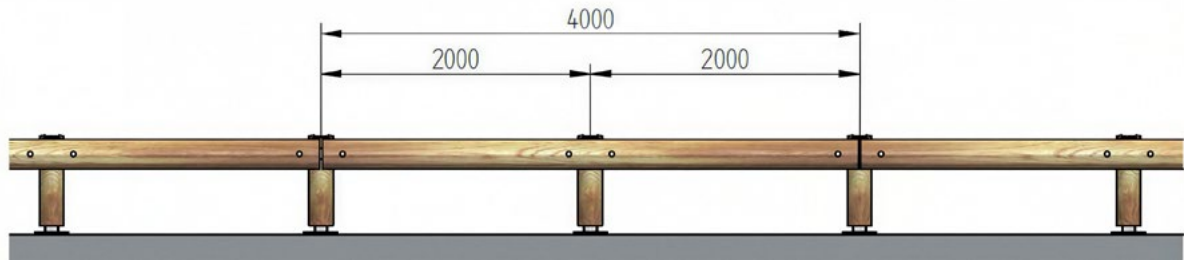
- Double containment level: N1 & N2
- Surface-mounted post
- ASI A



T22 4MS2 BP N1W2 - N2W4 ASI A

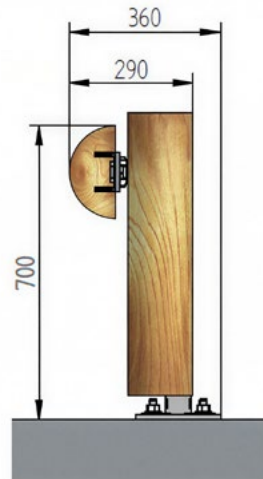


T22 4MS2 BP: CE n°1826-CPR-06-DR13
Notified body: Ascquer



Technical Information:

- Half-beam 22 cm, 4 m length, reinforced with pre-mounted U channel
- Surface mounted post: C125 steel base plate of 700 mm reinforced with C100 profile of 200 mm
- Post baseplate only requires 3 anchors reducing installation time and cost
- Pressure-tested wood with chromium and arsenic-free preservatives
- C125 Wooden spacer of 0.67 m height
- Standard minimum curvature is ≥ 20 metres. For tighter radius, smaller post spacing and curved beams may be required - contact Highway Care for guidance



Testing Conditions:

Containment level	Crash test criteria				Kinetic energy	Recommended level of use
	Test	Speed of impact	Angle of impact	Total weight of vehicle		
N2	TB 32	110km/h	20°	1500kg	81.9 kj	Normal containment
	TB 11	100km/h	20°	900kg	40.6 kj	

Model	Containment level	Standardised working width (Wn)	Standardised dynamic deflection (Dn)	Severity Class (ASI)	Minimum Length recommended
T22 4MS2 BP	N1 N2	W2 (0.8m) W4 (1.2m)	0.5m 1.0m	A (≤1.0)	60ml + (2*4ml)

System Profile

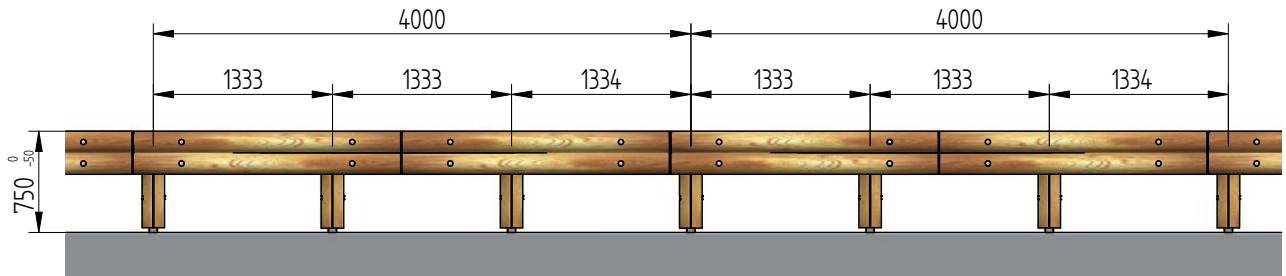
T32 1M33, 4MS2 & 2M66

- Containment level: N2
- Low working widths: W2 & W3
- ASI B



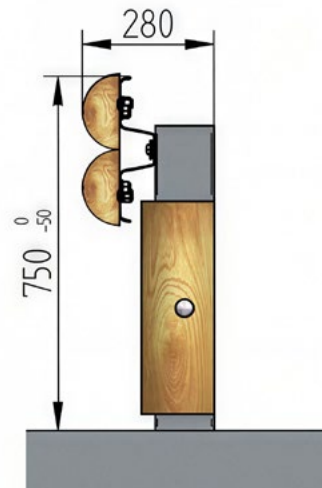
T32 1M33 N2W2 ASI B
T32 4MS2 N2W2 ASI B
T32 2M66 N2W3 ASI B

CE T32: CE n° 0497/CPR/5906
 Notified body: CSI



Technical Information :

- B profile steel rail (296×4300×2.5mm) clad with four half round logs of 16cm
- C125 steel post with welded plates and wooden side cladding, post spacing 1.33m, 2.00m, or 2.66m
- Pressure-tested wood with chromium and arsenic-free preservatives
- Standard minimum curvature is ≥35 metres. For tighter radius smaller post spacing and curved beams may be required - contact Highway Care for guidance



Testing Conditions:

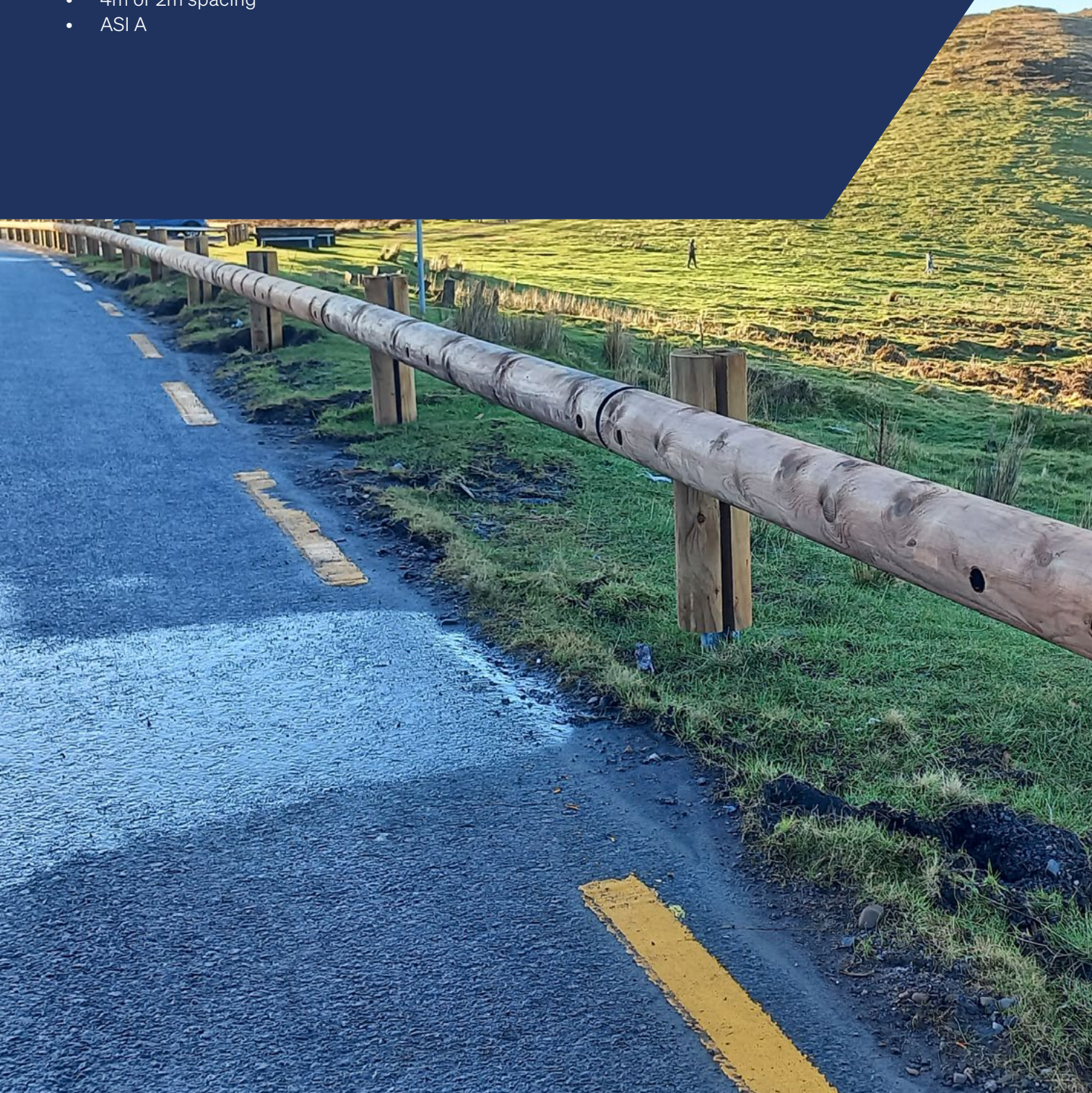
Containment level	Crash test criteria				Kinetic energy	Recommended level of use
	Test	Speed of impact	Angle of impact	Total weight of vehicle		
N2	TB 32	110km/h	20°	1500kg	81.9 kj	Normal containment
	TB 11	100km/h	20°	900kg	40.6 kj	

Model	Containment level	Standardised working width (Wn)	Standardised dynamic deflection (Dn)	Severity Class (ASI)	Minimum Length recommended
T32 1M33	N2	W2 (0.7m)	0.6m	B (≤1.4)	48ml + (2*12ml)
T32 4MS2	N2	W2 (0.8m)	0.7m	B (≤1.4)	48ml + (2*12ml)
T32 2M66	N2	W3 (0.9m)	0.8m	B (≤1.4)	48ml + (2*12ml)

System Profile

TM18 4M & 4MS2

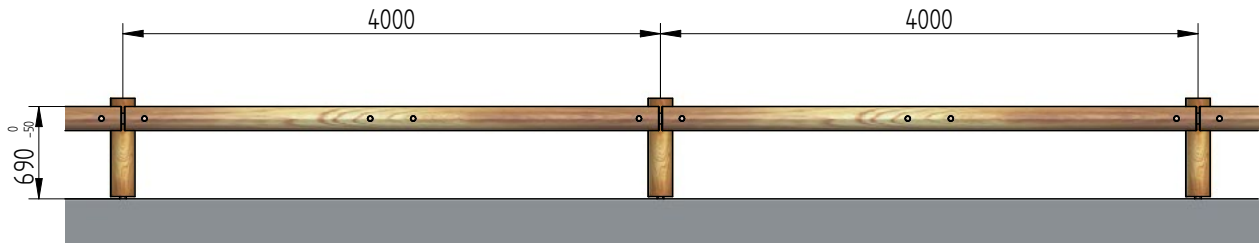
- Containment level: N2
- 4m or 2m spacing
- ASI A



TM18 4M N2W5 ASI A TM18 4MS2 N2W4 ASI A

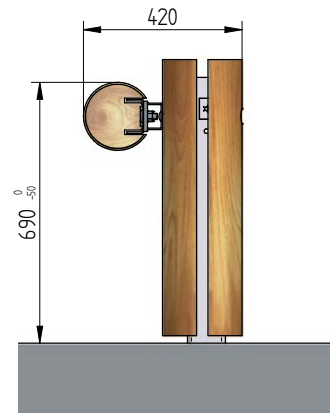


TM18 4M: CE n° 1826 CPR 09 02 06 DR06
TM18 4MS2: CE n° 1826 CPR 09 02 06 DR8
Notified body: Ascquer



Technical Information:

- Rail made of a round log, diameter 18cm, backed with a steel U channel inserted in the wooden rail
- C100 steel post in 1.50m, post spacing 2m or 4m, with a wooden spacer diameter 18cm
- Pressure-tested wood with chromium and arsenic-free preservatives
- Upstream and downstream tensioner kit
- Standard minimum curvature is ≥ 20 metres. For tighter radius, smaller post spacing and beams may be required - contact Highway Care for guidance



Testing Conditions:

Containment level	Crash test criteria				Kinetic energy	Recommended level of use
	Test	Speed of impact	Angle of impact	Total weight of vehicle		
N2	TB 32	110km/h	20°	1500kg	81.9 kj	Normal containment
	TB 11	100km/h	20°	900kg	40.6 kj	

Model	Containment level	Standardised working width (Wn)	Standardised dynamic deflection (Dn)	Severity Class (ASI)	Minimum Length recommended
TM18 4M	N2	W5 (1.7m)	1.2m	A (≤ 1.0)	72ml
TM18 4MS2	N2	W4 (1.3m)	1.1m	A (≤ 1.0)	72ml

System Profile

TM40 4MS2

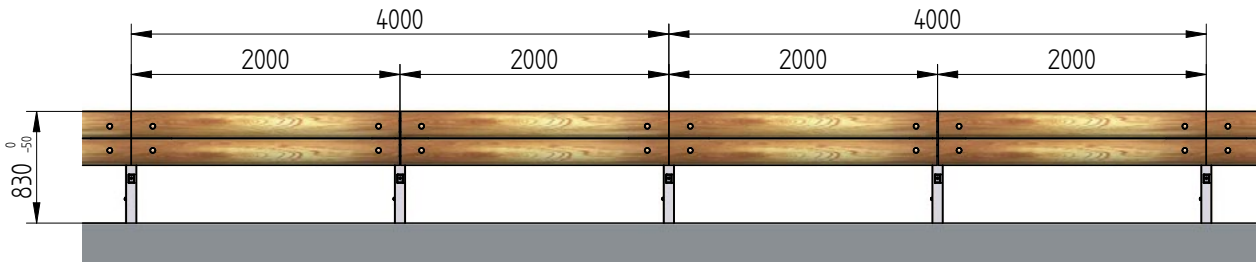
- Containment level : H2
- Suitable for heavy vehicles (13t)
- ASI A



TM40 4MS2 H2W5 ASI A

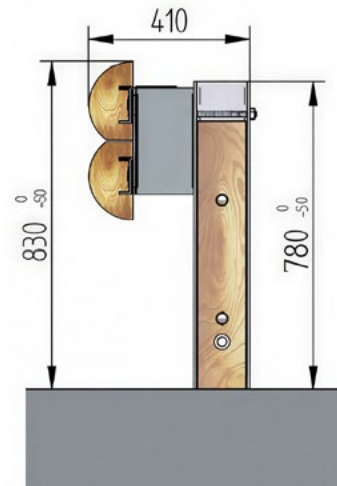


TM40 4MS2: CE n° 1826 CPR 09 02 06 DR10
Notified body: Ascquer



Technical Information:

- Rails built with two half round logs diameter 22cm, and reinforced with two steel channels of 4m length inserted on the back of the rail
- IPE steel posts 140 × 170cm wooden clad, post spacing 2m
- Pressure-treated wood with chromium and arsenic-free preservatives
- Upstream and downstream tensioner kit
- Standard minimum curvature is ≥ 30 metres. For tighter radius, smaller post spacing and beams may be required - contact Highway Care for guidance



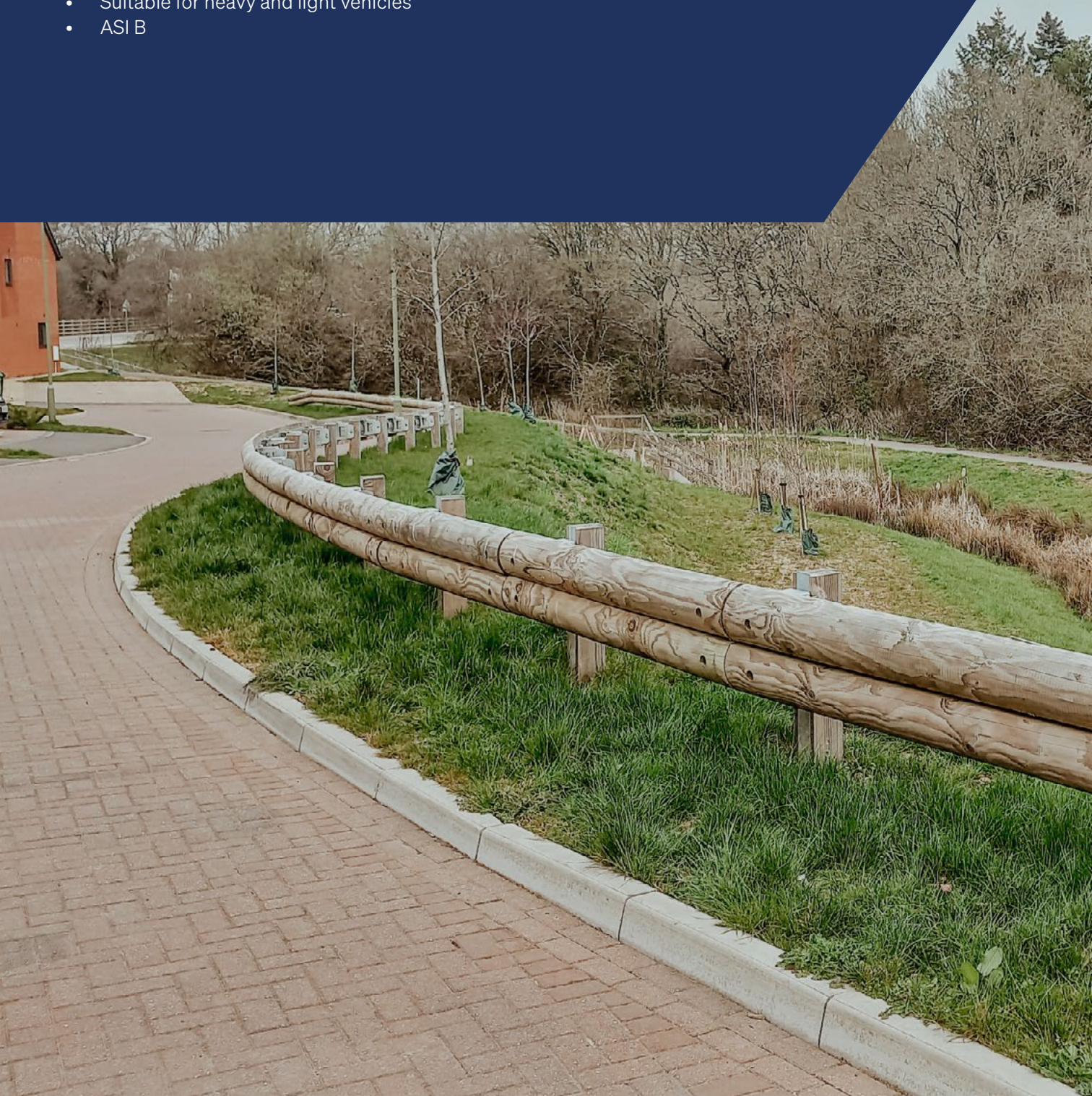
Testing Conditions:

Containment level	Crash test criteria				Kinetic energy	Recommended level of use
	Test	Speed of impact	Angle of impact	Total weight of vehicle		
H2	TB 51	70km/h	20°	13000kg	287.6 kJ	High containment
	TB 11	100km/h	20°	900kg	40.6 kJ	
Model	Containment level	Standardised working width (Wn)	Standardised dynamic deflection (Dn)	Severity Class (ASI)	Normalised vehicle intrusion (Vin)	Minimum Length recommended
TM40 4MS2	H2	W5 (1.6m)	1.5m	A (≤ 1.0)	VI5 (1.7m)	72ml

System Profile

T40 4MS2

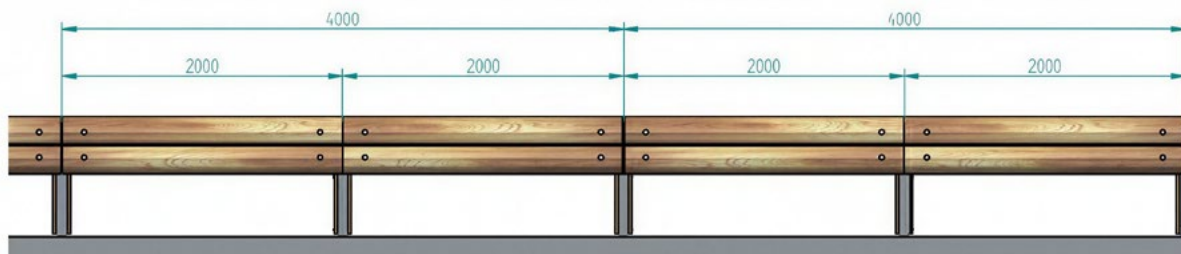
- Double containment level: L2
- Suitable for heavy and light vehicles
- ASI B



T40 4MS2 L2: H2W4 ASI B N2W3 ASI B

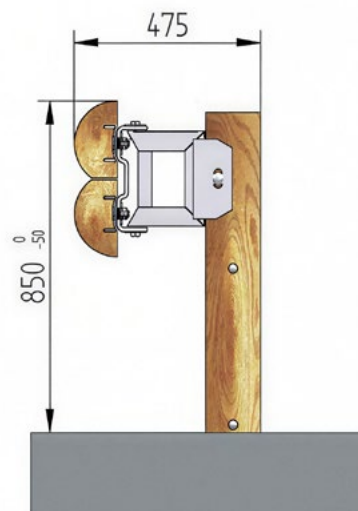


T40 4MS2: CE n° 1826 CPR 09 02 06 DR1
Notified body: Ascquer



Technical Information :

- Rails built with two half round logs, diameter 22cm and 2m long, backed with a 4m steel U profile inserted in the wooden rails
- IPE 140×200 cm steel post with 2 pre-mounted wooden cladding, post spacing 2m
- Pressure-tested wood with chromium and arsenic-free preservatives
- Standard minimum curvature is ≥ 30 metres. For tighter radius, smaller post spacing and beams may be required - contact Highway Care for guidance



Testing Conditions:

Containment level	Crash test criteria				Kinetic energy	Recommended level of use
	Test	Speed of impact	Angle of impact	Total weight of vehicle		
H2	TB 51	70km/h	20°	13000kg	287.6 kJ	High containment
	TB 11	100km/h	20°	900kg	40.6 kJ	
N2	TB 32	110km/h	20°	1500kg	81.9 kJ	Normal containment
	TB 11	100km/h	20°	900kg	40.6 kJ	
Model	Containment level	Standardised working width (Wn)	Standardised dynamic deflection (Dn)	Severity Class (ASI)	Normalised vehicle intrusion (Vin)	Minimum Length recommended
T40 4MS2	H2	W4 (1.2m)	0.8m	B (≤ 1.4)	VI3 =1.00m	92ml
	N2	W3 (1.0m)	0.5m			

System Profile

T40 4MS2 BP

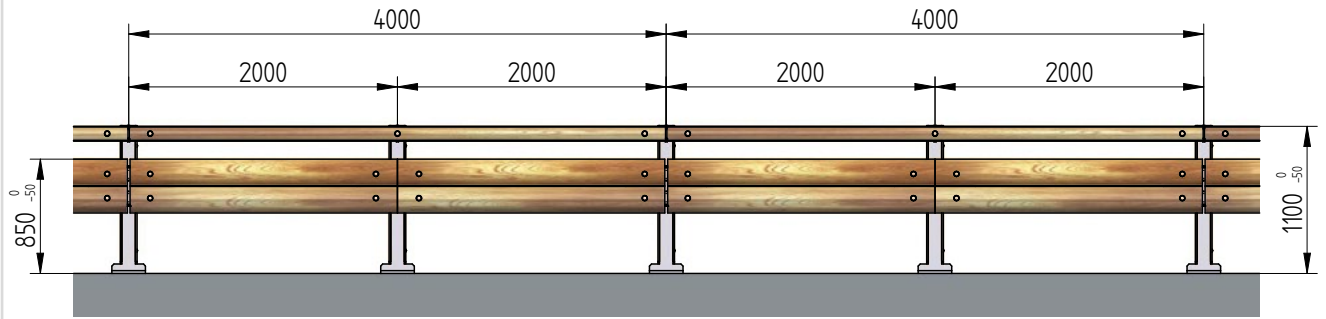
- Containment level: H2
- Barrier for bridge parapet
- ASI B



T40 4MS2 BP H2W5 ASI B

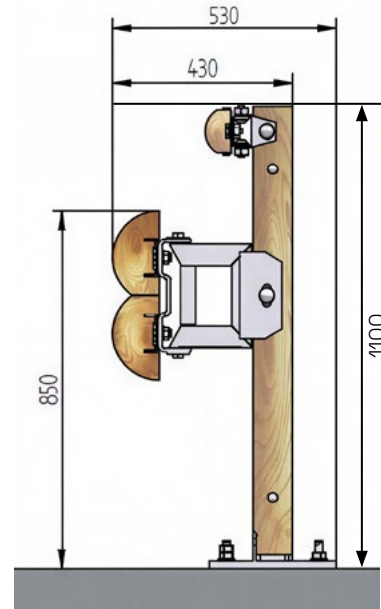


T40 4MS2 BP: CE n° 1826 CPR 09 02 06 DR2
Notified body: Ascquer



Technical Information:

- Two half round logs, diameter 22cm, length 4.00m, backed with a steel U profile inserted in the wooden rails
- Handrail with half round log, diameter 12cm in 4.00m length, backed with a steel U profile 120mm *200mm *3mm
- Pressure-tested wood with chromium and arsenic-free preservatives
- Steel post HEA 100 on steel base, 2m spacing, with two pre-mounted wooden clad elements
- Anchored on concrete base
- Standard minimum curvature is ≥ 30 metres. For tighter radius, smaller post spacing and beams may be required - contact Highway Care for guidance



Testing Conditions:

Containment level	Crash test criteria				Kinetic energy	Recommended level of use
	Test	Speed of impact	Angle of impact	Total weight of vehicle		
H2	TB 51	70km/h	20°	13000kg	287.6 kJ	High containment
	TB 11	100km/h	20°	900kg	40.6 kJ	
Model	Containment level	Standardised working width (Wn)	Standardised dynamic deflection (Dn)	Severity Class (ASI)	Normalised vehicle intrusion (Vin)	Minimum Length recommended
T40 4MS2 BP	H2	W5 (1.4m)	1.3m	B (≤ 1.4)	Vi5 =1.70m	94ml

Transitions, Accessories and Connections

- Easy to install transitions and connections
- Customisable accessories
- Bespoke options to meet site requirements



Transitions

- EN1317-10 certified transitions
- Easy to install transitions
- Enables change of system performance (working width and/or containment level) in the same barrier run

System Compatibility Table

	T32 1.33M	T32 4MS2	T32 2.66M	T22 4M	T22 4MS2	T22 4MS2 BP	T22 4MS2 MPS	T18 4M	T18 4MS2	TR18 4M	TR18 4MS2	TM18 4M	TM18 4MS2	T40 4MS2	T40BP 4SM2	TM40 4MS2
T32 1M33																
T32 4MS2																
T32 2M66																
T22 4M																
T22 4MS2																
T22 4MS2 BP																
T22 4MS2 MPS																
T18 4M																
T18 4MS2																
TR18 4M																
TR18 4MS2																
TM18 4M																
TM18 4MS2																
T40 4MS2																
T40BP 4SM2																
TM40 4MS2																

Transition Wood – Steel (T.A.T.)

Available for T18, TM18 and T22 vehicle restraint systems

- Steel transition between Tertu vehicle restraint system and steel barrier profiles A and B
- Used to connect vehicle restraint system with energy absorbing end terminals P2 or P4
- Tested at containment level N2 according to the ENV1317-10 standard
- Galvanised or powder coated (RAL 7008)



Connection to Wall

- Preassembled components, including 1m long vehicle restraint system piece bolted to the wall or concrete barrier with a wooden spacer
- Suitable for various wall configurations
- Galvanised or powder coated (RAL 7008)



Connection B to A Profile

- Powder coated (RAL 7008) connection, can be used to allow Ermes cushion to connect to T32 systems



Motorcyclist Protection

- Hot-dip galvanised steel panel, powder coated as standard
- Length: 4.32m
- Thickness 2mm, height 370mm
- Model T connection to post and terminal



Reflectors

- A night vision signage product with retro-reflective strip
- 8cm diameter round log, 11cm
- Fixed onto the timber clad steel restraint system



Wooden Cladding

- C100 post planed post cover: the wooden cover is inserted inside the steel post wings to offer the appearance of a complete 18cm round log
- Steel U-profile wood covering: designed to cover the U channel steel reinforcement



Handrail Extension on Arm(s)

- Round log, diameter 12cm with chamfer mounted onto the steel connecting tube
- Powder coated steel handrail (RAL 7008), made from 1 arm (or 2 arms). The connecting tube and one steel part are curved to be adjusted to the rail



Handrail Extension on Spacers

(Only for T18 and T22 models)

- Wooden spacer, diameter 18cm
- Round milled rail, chamfered at the ends – diameter 12cm fixed to the space, thanks to a fishplate
- C100 wooden cover



Protection for Cyclists

- Half-log diameter 14cm or 16cm fixed at the back side of the post via a fishplate



Energy-absorbing End Terminal

Available for systems across the range.

- Ermes energy absorbing crash cushions and end terminals at speeds of 50km/h, 80km/h and 110km/h
- Powder coated (RAL 7008)



Ramped End Terminal

Available for T18, TM18, TR18, T22, T22BP, T32, TM40 & T40

- 4m length for T18, TM18, TR18, T22 and T22BP
- 8m length for TM40 and T40
- 12m length for T32 (or shortened 4m length non-crash tested design)



Curved End Terminal

Available for all models

- Vehicle restraint system elements attached to a curved fishplate, allowing an angle of 130° to 150° to be achieved
- T32 system has alternative cylindrical or flared fishtails



Straight End Terminal

Available for all N2 systems

- Allows for ending the beam on the last post via alternative fishplate and/or post position



Double-sided Barriers

Available for T18, T22 and T40

- Pre-assembled 2m or 4m slide element attached to the rear of the spreader



Repair, Renovation and Maintenance



Wooden rail renovation

- Replacement of damaged rails
- Quick and simple operation
- No impact on performance

Renovation

Thanks to the ingenious design of Tertu vehicle restraint systems, installations can be renovated to extend their service life.

Damaged wooden rails can be replaced individually without the need to dismount the vehicle restraint system with no impact on performance.

Benefits:

Enhancing safety:

- Installation and removal are carried out as work progresses, guaranteeing that the required restraint performance is maintained throughout

Simplified works:

- Individual replacement of the beams means no work is required on the rest of the barrier run
- No work is required on existing elements, including supports and metal reinforcement
- Bolts and nuts are accessible for ease of replacement

Cost effectiveness:

- Unless the metal reinforcement has been damaged due to an impact, the cost of renovation is limited to the wooden beams and bolts
- Reduced work programme results in lower labour costs

Environmentally responsible:

- Redundant beams can be recycled because of the chrome and arsenic-free treatment during their production
- Renovating the vehicle restraint system reduces the amount of materials needed to maintain safety performance, leveraging the extended service life of the steel barrier

Maintenance

The wood used to create the Tertu vehicle restraint system is pressure-treated in an autoclave after machining, using chrome and arsenic-free preservatives (WOLMANIT® CX8F), in accordance with the EN 335 standard. This means that the treated wood is both durable and recyclable at the end of its service life.

Thanks to the natural properties of Douglas Fir, the treatment is carried out without the need for energy-intensive drying processes, helping to limit the system's environmental impact.

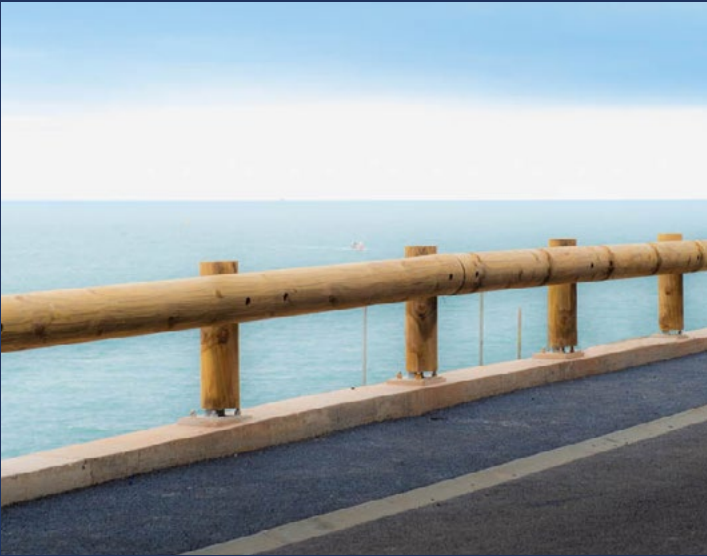
When installed in accordance with the Tertu manual, the vehicle restraint system does not require any special maintenance. However, regular visual inspections are recommended in order to identify any situation that could affect performance.

Even when treated, wood remains a living material. Cracks may appear as a result of variations in temperature and humidity – this is a natural phenomenon that does not affect the performance or quality of the product.



Secure 10% off your next order

Tertu TimberRail is an ideal solution for a wide variety of environments, safety challenges and design ideas. Why not share yours with us to be eligible for 10% off your next order. Simply share you pictures on LinkedIn tagging Highway Care Ltd for your discount. Terms and conditions apply.





Innovative solutions for a safer future

We are experts in protecting people and places.

Our Tertu TimberRail range offers:

- Effective VRS performance
- Natural aesthetics
- A versatile solution for varied environments



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