



Axelent test summary - XTR-103

Barrière de protection lourde

Summary overview

Summary number	XTR-103	Revision	0
Issue date	2022-09-09		

Description of barrier and configuration used	1-3	adjoining sections of Double Impact with 2 Impact rails
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Test method	Ramp
Striker type	Replica FLT rear
Speed measuring device	Leuze Electronic AMS 348i 40 50113709, SN: 70002781528
Deflection measuring device	Leuze Electronic AMS 348i 40 50113709, SN: 70002781526
Force measuring device	Dini Argeo DGT1IO readers, SN: 100175 & 100176. Vetek ARL-12t 1.5mV/V load cells
Torque wrench	Jo Fast 2-GTS-1/2", SN: 85045
Humidity & Temperature meter	RS PRO 1260, SN: 211003773, UKAS CN: 1737343
Test coordinator/s	EW & MDD
Test observers (initials)	RO & AN

Test results

Tested item	XTR test number	Referenced test number	Validation test number	Adjoining sections	Environmental temperature	Environmental humidity	Mass	Striker height from floor	Speed	Tested force	Maximum useable force	Published useable force	Deflection	Force to fixings	Barrier pass or fail
Mid rail 2.5m C-C	XTR-103-MR2500	2022-06-16 #19: 087- I200/2500/MR	2022-06-16 #18: 087- I200/2500/MR	3	20°C	52 %	2619 kg	Truck rear 70mm above floor	8,3 km/h	6961 J	6613 J	4200 J	370 mm	10,4 kN	P
Mid rail 3m C-C	XTR-103-MR3000	2022-06-22 #39: 087- I200/3000/MR	2022-06-22 #38: 087- I200/3000/MR	3	20°C	54 %	2619 kg	Truck rear 70mm above floor	8,35 km/h	7045 J	6693 J	3900 J	425 mm	12,2 kN	P
End post	XTR-103-EP	2022-07-28 #79: 087-I200/2500/EP	2022-07-28 #78: 087-I200/2500/EP	1	20°C	62 %	2619 kg	Truck rear 70mm above floor	7,99 km/h	6451 J	6128 J	4500 J	NA	15,5 kN	P
Mid post	XTR-103-MP	2022-07-28 #75: 087- I200/2500/MP	2022-07-28 #76: 087- I200/2500/MP	2	20°C	62 %	2619 kg	Truck rear 70mm above floor	7,99 km/h	6451 J	6128 J	4500 J	NA	12,4 kN	P

Fixings results (worst case from above tests)

Test number	Fixing manufacturer & part #	Rated design performance	Recorded force to fixings	P/F
XTR-103-EP	HILTI HSA M16 x 182mm PN: 2004164 ¹	33.3 kN	15,5 kN	P

¹ For testing purposes we use Hilti wedge anchors. X-Protect is supplied with JCP M10 x 106mm PN: JHD1015 with a design resistance of 20.1 kN

Tested configurations

