

Simulation factsheet

Simulation characteristics	
Reference	SAS-RD003-010
Author	Chloé BORGET
Simulation type	Evaluation
Date of delivery	13/11/2025

Barrier characteristics	
Barrier name	ProGuard City Barrier
Reference data	RD003-071_mounted.stp
Test conditions	T1 / 7 barriers

Expected Results

Simulation evaluation: Vehicle trajectory, Severity indices, Deformation measures, Vehicle velocity, ...

Simulation video: V-SAS-RD003-010.mp4

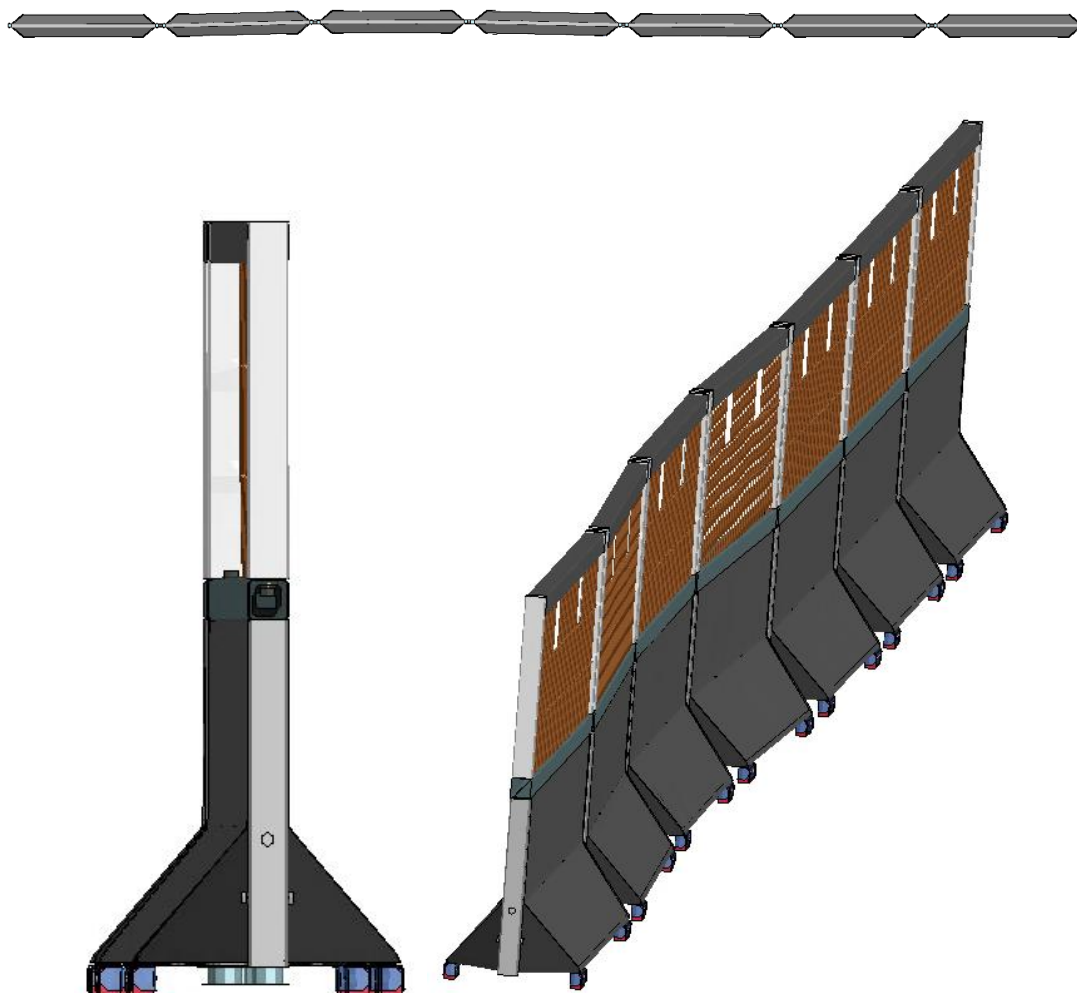
Material characteristics

Part	Nuance	Values	Sources
RD003-040 (concrete)	C30/37	Compression resistance: 37MPa	TRANSPOLIS
RD003-0017 (rubber)	rubber	Shear modulus: 18 MPa	TRANSPOLIS
RD003-008 (foot)	S235JR	Re: 235 MPa Rm: 360 MPa A%: 26 %	Min of standard
RD003-045 (corner)	S235JR	Re: 235 MPa Rm: 360 MPa A%: 26 %	Min of standard
RD003-001 (cover plate)	S235JR	Re: 235 MPa Rm: 360 MPa A%: 26 %	Min of standard
RD003-002 (tube_lat)	S355JR	Re: 355 MPa Rm: 470 MPa A%: 22 %	Min of standard
RD003-003 (middle_bar)	S355JR	Re: 355 MPa Rm: 470 MPa A%: 22 %	Min of standard
RD003-004 (tube_lat_top)	S355JR	Re: 355 MPa Rm: 470 MPa A%: 22 %	Min of standard
RD003-005 (tube_top)	S355JR	Re: 355 MPa Rm: 470 MPa A%: 22 %	Min of standard
RD003-053 (metal_plate)	S235JR	Re: 235 MPa Rm: 360 MPa A%: 26 %	Min of standard
RD003-074 (locking_bar)	S355JR	Re: 355 MPa Rm: 470 MPa A%: 22 %	Min of standard
RD003-008	S235JR	Re: 235 MPa Rm: 360 MPa A%: 26 %	Min of standard
RD003-069 (link_tube)	S235JR	Re: 235 MPa Rm: 360 MPa A%: 26 %	Min of standard
RD003-012 (link_plate)	S235JR	Re: 235 MPa Rm: 360 MPa A%: 26 %	Min of standard
RD003-033 (mesh)	S235JR	Re: 235 MPa Rm: 360 MPa A%: 26 %	Min of standard
RD003-058 (large_rebar)	K500	Re: 550 MPa Rm: 603 MPa A%: 10 %	Min of standard
Tube_int	S235JR	Re: 331 MPa Rm: 428 MPa A%: 35 %	Average of standard
Bracket	S235JR	Re: 331 MPa Rm: 428 MPa A%: 35 %	Average of standard
Fourreau_vis	S235JR	Re: 331 MPa Rm: 428 MPa A%: 35 %	Average of standard
Tube_ext	S235JR	Re: 331 MPa Rm: 428 MPa A%: 35 %	Average of standard

Standard	Test	Masse [kg]	Velocity [km/h]	Angle [°]
/	TB21 Type	1 300	50	8
Impact area				
Hypothesis	Friction between steel feet and asphalt 0.6			

Results

View
of
deformations



Measures

Class

W1
VI1
A

Dm: 0.07 m

Wm: 0.46 m

VI_m: 0.20 m

ASI: 0.13

THIV: 3.23 km/h

