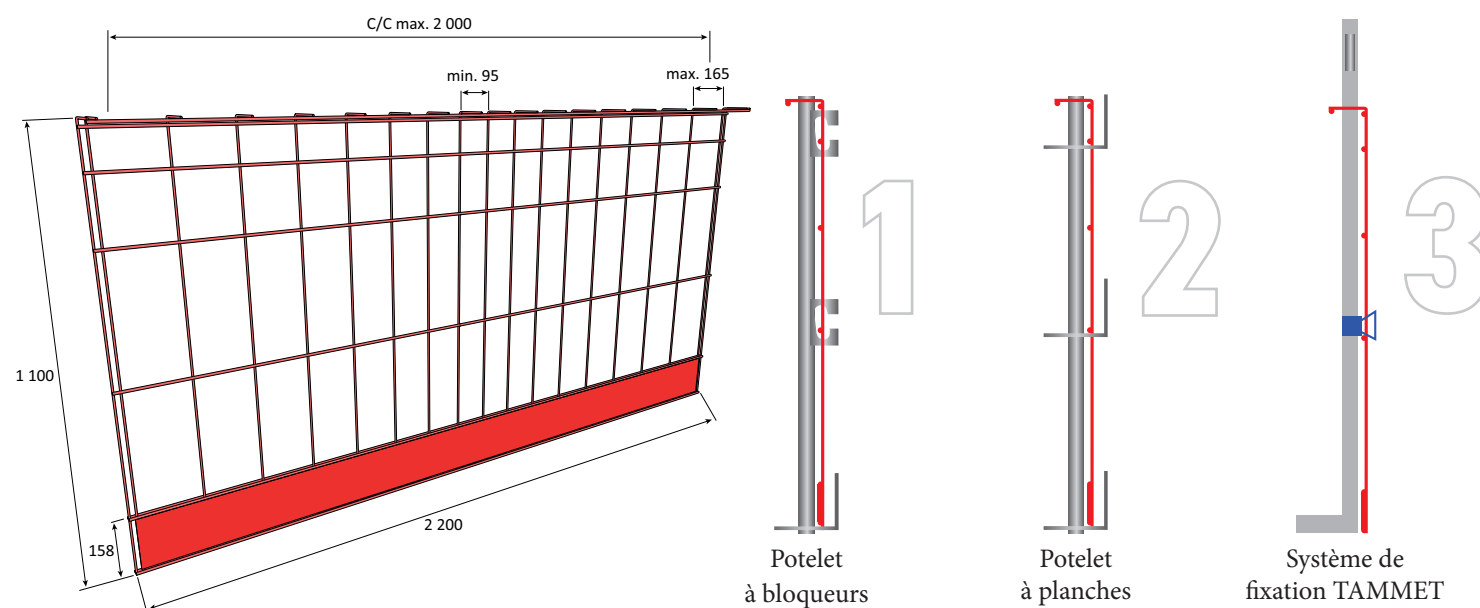


ÉCO BARRIÈRE Lg 2.20 m - HT 1.10 m

ADAPTABLE SUR 3 SUPPORTS



2.20 x 1.10 m

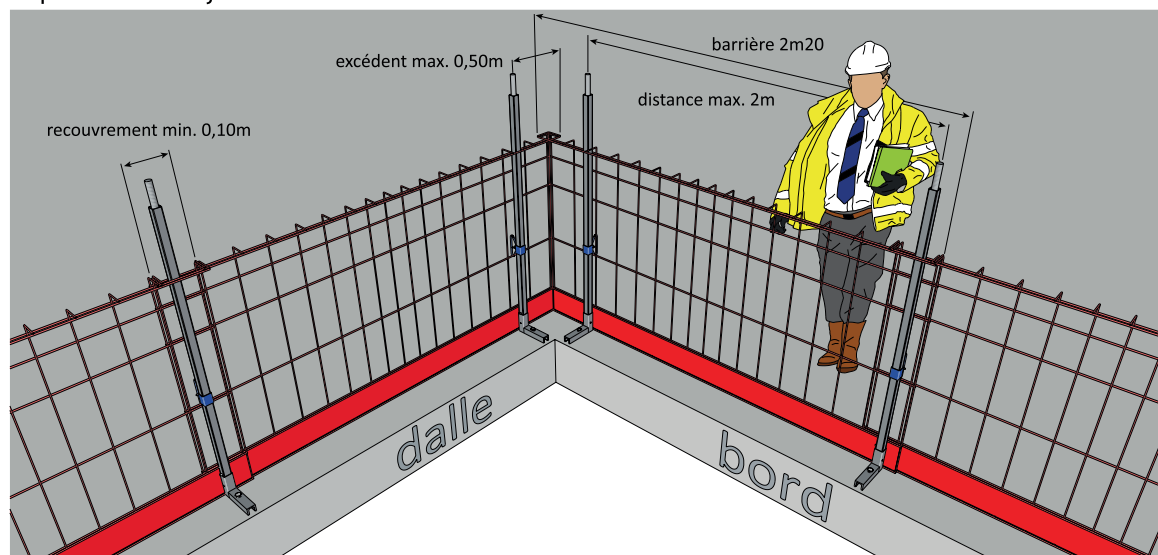


DESCRIPTION

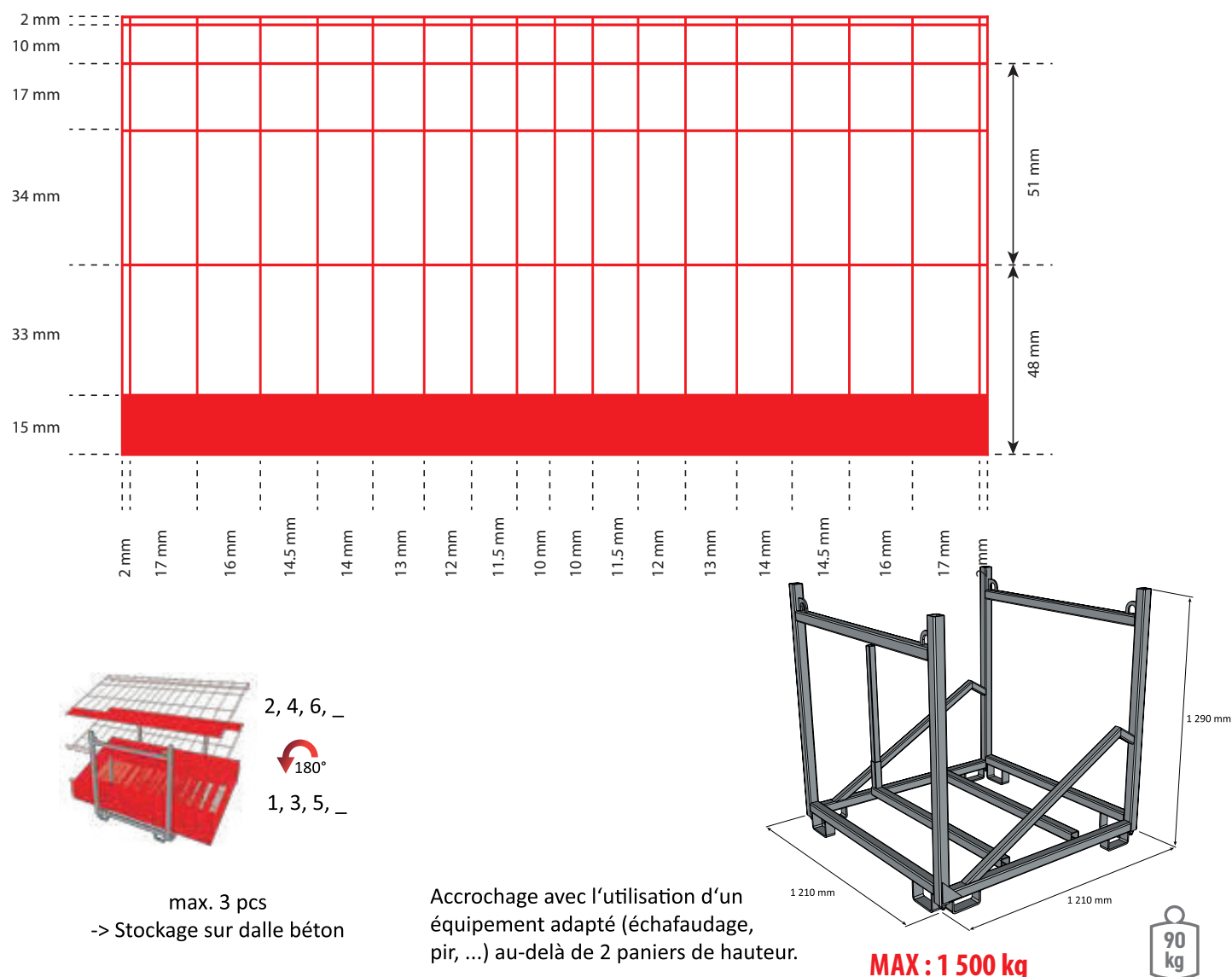
Barrière pour montage sur tout type de supports :

- Supports Tammet
- Supports potelets standards à planches ou à bloqueurs Ø25 ou Ø40 mm

La plinthe doit toujours se situer vers le sol.



Détail dimensions Modèle Lg 2.20 x Ht 1.10 m



ÉCO BARRIÈRE Lg 2.20 m - HT 1.10 m

 QUALITY SYSTEM SFS-EN ISO 9001:2015 PROCESS: Barrier Testing DOCUMENT: Static Load testing according to EN 13374:2013	Page: 1 Version: Author: Ingmar Baarman Edited, date: 19.5.2017 Approved: SKg
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Static load test of temporary edge protection according to EN 13374 Class A: 2013-07

Product: 2078542 ECO Light Barrier FRA (2200)	Date of test: 19.5.2017
The test was performed by: Ingmar Baarman & Robin Mattson	

The loads have to be applied at the most onerous points and the barrier has to be mounted according to the mounting and user instructions

1.0 Servability Limit State - Toeboard level / Guardrails level (max. deformation 55 mm) (Tab. 2 and Clause 6.3.2)

- 1.1 Datum point δ_1 after initial test load (full load (30 or 20 kg) for 1 min.)
- 1.2.1 Pointload $F_{T1}=0,3$ kN (~30 kg) applied anywhere perpendicular to the plane except the toeboard; $\gamma_F = 1,0$ $\gamma_M = 1,0$
- 1.2.2 Point load $F_{T2}=0,2$ kN (~20 kg) applied perpendicular to the toeboard
- 1.3 Elastic deflection of the system $\delta_2 - \delta_1 = B_{vor}$ (avg. max. 55 mm, no separate value shall exceed 60 mm)(7.4.2.3)

2.0 Ultimate Limit State (The sample has to take the loads -> no yielding, fractures or separation of parts) (Tab. 2 and Clause 6.3.3)

- 2.1.1 Load applied anywhere perpendicular to the plane except the toeboard $F_{max} = \gamma_m \times \gamma_t \times Q_K$ $F_{max} = 495$ N
 $\gamma_F = 1,5$ $\gamma_M = 1,1$ (ductile metallic material) $Q_K = F_{H1} = 300$ N (~30 kg)
- 2.1.2 Load applied anywhere perpendicular to the toeboard $F_{max} = \gamma_m \times \gamma_t \times Q_K$ $F_{max} = 330$ N
 $\gamma_F = 1,5$ $\gamma_M = 1,1$ (ductile metallic material) $Q_K = F_{H2} = 200$ N (~20 kg)
- 2.2 State after 1 minute F_{max} (no yielding, fractures or separation of parts)
- 2.3 The system should then be loaded up to the ultimate load R_u where there is identifiable failure (7.4.3.1.)(last test before scrapping the barrier)

3.0 Ultimate Limit State , Maximum Wind (The sample has to take the loads -> no yielding, fractures or separation of parts) (Tab. 2 and Clause 6.3.4)

- 3.1 Test load applied to the whole area of the edge barrier element $F_{max} = \gamma_m \times \gamma_t \times Q_K \times c$, $F_{max} = 891$ N
 $\gamma_F = 1,5$ $\gamma_M = 1,1$ (ductile metallic material) $Q_{MW} = 600$ N/m² $Area_v = 0,45$ m²
- 3.2 State after 1 minute F_{max} (no yielding, fractures or separation of parts)

4.0 Ultimate Limit State - Load Combination (Toeboard level / All other parts)

(The sample has to take the loads -> no yielding, fractures or separation of parts) (Tab. 2 and Clause 6.3.5)

- 4.1.1 Point load applied anywhere perpendicular to the plane except toeboard $F_{max} = (\gamma_m \times \gamma_t \times F_{H1} \text{ point load}) + (\gamma_m \times \gamma_t \times Q_{WW} \text{ distributed load} \times \text{area} \times c)$ $F_{max} = 495 + 297$ N
 $\gamma_F = 1,5$ $\gamma_M = 1,1$ (ductile metallic material) $F_{H1} = 300$ N (~30 kg) $Q_{WW} \text{ distributed load} = \text{area} \times 200$ N/m²
- 4.1.1 Point load applied anywhere perpendicular to the toeboard $F_{max} = (\gamma_m \times \gamma_t \times F_{H2} \text{ point load}) + (\gamma_m \times \gamma_t \times Q_{WW} \text{ distributed load} \times \text{area})$ $F_{max} = 330 + 297$ N
 $\gamma_F = 1,5$ $\gamma_M = 1,1$ (ductile metallic material) $F_{H2} = 200$ N (~20 kg) $Q_{WW} \text{ distributed load} = 200$ N/m²
- 4.2 State after 1 minute F_{max} (no yielding, fractures or separation of parts)

5.0 Ultimate Limit State Parallel to guardrail (Tab. 2 and Clause 6.3.6)

- 5.1 Horizontal load applied parallel to guardrail on most onerous point $F_{max} = \gamma_m \times \gamma_t \times Q_K$ $F_{max} = 330$ N
 $\gamma_F = 1,5$ $\gamma_M = 1,1$ (ductile metallic material) $Q_K = F_{H3} = 200$ N
- 5.2 State after 1 minute F_{max} (no yielding, fractures or separation of parts)

6.0 Ultimate Limit State with Accidental Load (Table 2. and 6.3.7) (The sample has to take the loads

-> no fractures or separation of parts + maximum 300 mm deflection under max load)

- 6.1 Datum point δ_1 after initial test load (0,1 kN for 1 min.)(Messabstand ≤ 5 mm?)
- 6.1 Load applied anywhere along the top edge of the guardrails level $F_{max} = \gamma_m \times \gamma_t \times Q_K$ $F_{max} = 1250$ N
 $\gamma_F = 1,0$ $\gamma_M = 1,0$ $Q_K = F_D = 1250$ N
- 6.2 State after 1 minute F_{max} (no yielding, fractures or separation of parts)
- 6.3 Elastic deflection of the system $\delta_2 - \delta_1 = B_{vor}$ (avg. max. 300 mm)

Sample	Mounting position and height (mm)	1.1/6.1 Datum position (mm)	1.2 $F_{T1} F_{T2}$ (N)	1.3 Deflection (mm)	1.3 Deflection δ Avg. Max 55 (mm)	2.2 F_{max} (N)	2.3 R_u >800 (N)	3.2 F_{max} (891 N) State	4.2 F_{max} (N) State	5.2 F_{max} (N) State	6.2 F_{max} (N) State	6.3 1250 N B_{vor} Max 300 (mm)
1	Toeboard	1527	50	1490	37	OK	OK	OK	OK	OK	OK	
			100									
			150									
			200									
			250									
2	Guardrail	1520	300	1473	47	OK			OK			35
			1 min									
			50									
			100									
			150									
3	Toeboard	1533	200	1496	37	OK	OK	OK	OK	OK	OK	
			250									
			300									
			1 min									
			50									
4	Guardrail	1535	200	1476	59	OK			OK			33
			250									
			300									
			1 min									
			50									
5	Toeboard	1523	100	1489	34	OK	OK	OK	OK	OK	OK	
			150									
			200									
			250									
			300									
6	Guardrail	1523	1 min	1476	47	OK			OK			34
			50									
			100									
			150									
			200									
7	Toeboard	1528	250	1491	37	OK	OK	OK	OK	OK	OK	
			300									
			1 min									
			50									
			100									
8	Guardrail	1521	150	1477	44	OK			OK			38
			200									
			250									
			300									
			1 min									