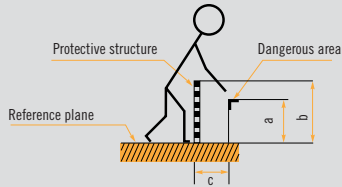


> EN ISO 13857, 4.2.2: Reaching over protective structures.

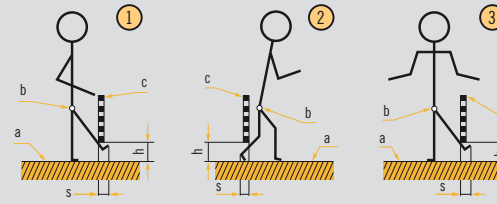


a: height of hazard zone
b: height of protective structure
c: horizontal distance to hazard zone



> EN ISO 13857, appendix B. Distances to impede free access by lower limbs

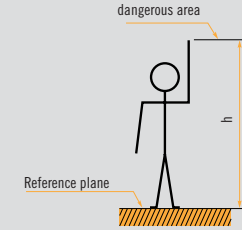
(TABLE 1)



a: reference plane
b: hip joint
c: protective structure

> The pictures 1, 2 and 3 report the distances s for particular cases where the access of the lower limbs of a person in a standing position is impeded without supplementary measures. If the height h up to the bottom of the guard ranges between two values, the distance indicated for the higher h value should be used.

> EN ISO 13857, 4.2: Reaching upwards (TABLE 2)

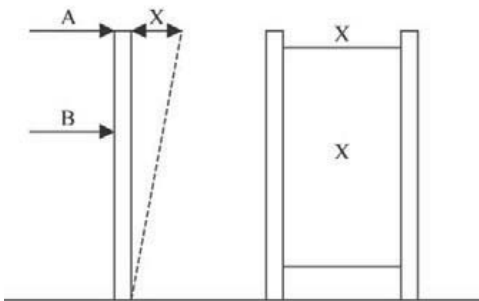


> If the **dangerous area is at low risk**, the height h of this area shall be ≥ 2500 mm.

> If the **dangerous area is at high risk**, the height h of the dangerous area shall be ≥ 2700 mm or further safety measures shall be adopted.

> Resistance test to horizontal impacts

A	Horizontal force at the panel upper end
B	Horizontal force in the middle of the panel
X	Deformation less than 40 mm



Fixing to the ground with anchors for reinforced concrete M8

> Resistance of 40 x 40 posts - panel H1900 - frame 20:

A: ≤ 300 N
B: ≤ 500 N

> Resistance of 60 x 60 posts - panel H1900 - frame 20:

A: ≤ 500 N
B: ≤ 800 N

> Resistance of 80 x 80 posts - panel H1900 - frame 20:

A: ≤ 1000 N
B: ≤ 1500 N

TABLE 1

Height of the guard h from the ground	Minimum distance s		
	1	2	3
$h \leq 200$	≥ 340	≥ 665	≥ 290
$200 < h \leq 400$	≥ 550	≥ 765	≥ 615
$400 < h \leq 600$	≥ 580	≥ 950	≥ 800
$600 < h \leq 800$	≥ 950	≥ 950	≥ 900
$800 < h \leq 1000$	≥ 1125	≥ 1195	≥ 1015

TABLE 2

Height of dangerous zone a	Height of the protection structure b									
	1000	1200	1400	1600	1800	2000	2200	2400	2500	2700
2700	-	-	-	-	-	-	-	-	-	-
2600	900	800	700	600	600	500	400	300	100	-
2400	1100	1000	900	800	700	600	400	300	100	-
2200	1300	1200	1000	900	800	600	400	300	-	-
2000	1400	1300	1100	900	800	600	400	-	-	-
1800	1500	1400	1100	900	800	600	-	-	-	-
1600	1500	1400	1100	900	800	500	-	-	-	-
1400	1500	1400	1100	900	800	-	-	-	-	-
1200	1500	1400	1100	900	700	-	-	-	-	-
1000	1500	1400	1000	800	-	-	-	-	-	-
800	1500	1300	900	600	-	-	-	-	-	-
600	1400	1300	800	-	-	-	-	-	-	-
400	1400	1200	400	-	-	-	-	-	-	-
200	1200	900	-	-	-	-	-	-	-	-
0	1100	500	-	-	-	-	-	-	-	-

Technical resistance specifications of SATECH components

> Posts and mesh or sheet panels

Material: low-carbon steel
Ultimate tensile stress: ≥ 380 N/mm²
Yield point: ≥ 210 N/mm²

> Transparent panels

Material: polycarbonate
Characteristics: transparency and impact strength