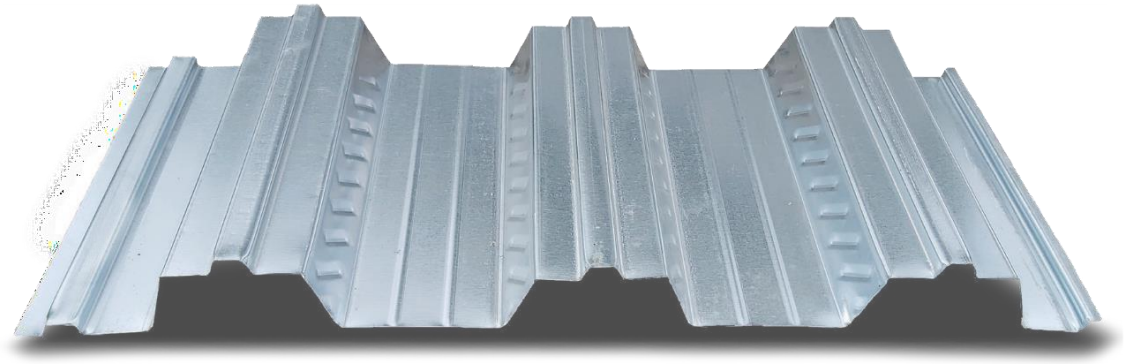
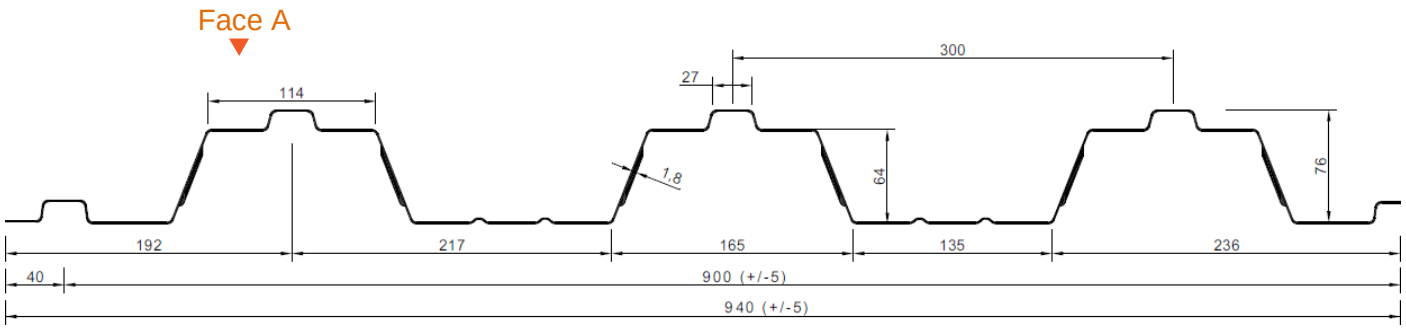
RM76

FLOOR PROFILE - CE marking according to EN 14782.

CE 19





Base material

Structural Steel S320GD+Z (EN10346)

Durability / Type of protection

Galvanized (EN10346)

GEOMETRIC CHARACTERISTICS

Thickness	Area	Weight	Moment of Inertia	Resistant Module
(mm)	(cm^2/m)	(kg/m^2)	($I = cm^4/m$)	($W = cm^3/m$)
0.8	11.27	8.85	93.08	19.74
1.0	14.12	11.08	116.36	24.62
1.2	16.91	13.28	139.64	29.48

Total slab thickness (cm)	12	13	14	15	16	18	20
Concrete consumption (m^3/m^2)	0.089	0.099	0.109	0.119	0.129	0.149	0.169
Own weight of the slab (Kg/m^2)	236	261	286	311	336	386	436
Lajeta area (cm^2/m)	560	660	760	860	960	1160	1360

* The values presented (kN/m2) are the responsibility of Rede Moderna, which may change the specifications.

he values in the following tables were taken from the test report carried out at the Faculty of Engineering of the University of Porto - CONSTRUCT-LABEST. CONSTRUCT-LABEST according to Euro code recommendations 4.

REDE MODERNA

RM76

COMPOSITE SLAB WITH PROFILE

Simply supported composite slabs with thick profiled sheetin e = 0.8 mm

TABLE OF PERMISSIBLE LOADS (kN/m²)

Concrete class: C25/30							
L = Distance between supports (m)	H = Total slab thickness (cm)						
	12	13	14	15	16	18	20
1.4	22.7	25.3	27.9	30.5	33.1	38.3	43.6
1.6	17.8	19.9	21.9	24.0	26.0	30.1	34.2
1.8	14.4	16.1	17.7	19.4	21.0	24.4	27.7
2.0	11.9	13.2	14.6	16.0	17.3	20.1	22.8
2.2	9.9	11.1	12.2	13.4	14.5	16.8	19.1
2.4	8.4	9.4	10.4	11.4	12.4	14.3	16.3
2.6	7.2	8.1	8.9	9.8	10.6	12.3	14.0
2.8	6.3	7.0	7.7	8.4	9.2	10.6	12.1
3.0	5.4	6.1	6.7	7.4	8.0	9.3	10.5
3.2	4.8	5.3	5.9	6.4	7.0	8.1	9.3
3.4	4.2	4.7	5.2	5.7	6.2	7.2	8.1
3.6	3.7	4.1	4.6	5.0	5.4	6.3	7.2
3.8	3.3	3.7	4.0	4.4	4.8	5.6	6.4
4.0	2.9	3.2	3.6	3.9	4.3	5.0	5.7
4.2	2.3	2.9	3.2	3.5	3.8	4.4	5.0
4.4	-	2.2	2.8	3.1	3.4	3.9	4.5
4.6	-	-	2.1	2.7	3.0	3.5	4.0
4.8	-	-	-	-	2.6	3.1	3.5
5.0	-	-	-	-	-	2.8	3.1

Factors affecting design (mixed phase)
(according to the color of the cargo value in the table):

x.x – Longitudinal shear stress (Vl,Rd)
x.x – Service arrow

The values in the table above (kN/m2) represent the characteristic value of all the additional actions to be applied to the composite slab in addition to its own weight.

Need for shoring (formwork phase)

- **No shoring required**
- **Need for a shoring line**
- Need for a shoring line
- **Need for a shoring line**

REDE MODERNA

RM76

COMPOSITE SLAB WITH PROFILE

Continuous slabs with thick profiled sheeting e = 0.8 mm

TABLE OF PERMISSIBLE LOADS (kN/m²)

Concrete class: C25/30							
L = Distance between supports (m)	H = Total slab thickness (cm)						
	12	13	14	15	16	18	20
1.4	22.1	24.6	27.1	29.6	32.0	37.0	41.9
1.6	18.8	20.9	23.0	25.1	27.2	31.4	35.6
1.8	16.2	18.0	19.9	21.7	23.5	27.1	30.7
2.0	14.3	15.8	17.4	19.0	20.5	23.7	26.9
2.2	12.1	13.5	14.9	16.2	17.6	20.4	23.2
2.4	10.3	11.5	12.7	13.9	15.1	17.4	19.8
2.6	8.9	9.9	10.9	12.0	13.0	15.1	17.1
2.8	7.7	8.6	9.5	10.4	11.3	13.1	14.9
3.0	6.8	7.6	8.4	9.2	9.9	11.5	13.1
3.2	6.0	6.7	7.4	8.1	8.8	10.2	11.6
3.4	5.3	5.9	6.6	7.2	7.8	9.0	10.3
3.6	4.7	5.3	5.9	6.4	7.0	8.1	9.2
3.8	4.2	4.7	5.2	5.7	6.2	7.2	8.2
4.0	3.8	4.3	4.7	5.2	5.6	6.5	7.4
4.2	3.4	3.8	4.2	4.6	5.0	5.9	6.7
4.4	3.1	3.5	3.8	4.2	4.6	5.3	6.0
4.6	2.8	3.1	3.5	3.8	4.1	4.8	5.5
4.8	2.5	2.8	3.1	3.4	3.7	4.3	4.9
5.0	2.3	2.6	2.8	3.1	3.4	3.9	4.5

Factors affecting design (mixed phase)
(according to the color of the cargo value in the table):

x.x – Longitudinal shear stress (Vl,Rd)
x.x – Service arrow

The values in the table above (kN/m2) represent the characteristic value of all the additional actions to be applied to the composite slab in addition to its own weight.

Need for shoring (formwork phase)

- **No shoring required**
- **Need for a shoring line**
- Need for a shoring line
- **Need for a shoring line**

REDE MODERNA

RM76

COMPOSITE SLAB WITH PROFILE

Simply supported composite slabs with thick profiled sheetin e = 1.0 mm

TABLE OF PERMISSIBLE LOADS (kN/m²)

	Concrete class: C25/30						
L = Distance between supports (m)	H = Total slab thickness (cm)						
	12	13	14	15	16	18	20
1.4	26.8	29.9	33.0	36.0	39.1	45.3	51.2
1.6	21.0	23.4	25.8	28.2	30.6	35.4	40.3
1.8	16.9	18.8	20.8	22.7	24.6	28.5	32.4
2.0	13.9	15.5	17.1	18.7	20.3	23.5	26.7
2.2	11.6	12.9	14.3	15.6	17.0	19.6	22.3
2.4	9.8	11.0	12.1	13.2	14.4	16.7	18.9
2.6	8.4	9.4	10.4	11.3	12.3	14.3	16.2
2.8	7.3	8.1	9.0	9.8	10.7	12.4	14.1
3.0	6.3	7.1	7.8	8.5	9.3	10.8	12.2
3.2	5.5	6.2	6.8	7.5	8.1	9.4	10.7
3.4	4.9	5.4	6.0	6.6	7.2	8.3	9.5
3.6	4.3	4.8	5.3	5.8	6.3	7.4	8.4
3.8	3.8	4.3	4.7	5.2	5.6	6.5	7.4
4.0	3.4	3.8	4.2	4.6	5.0	5.8	6.6
4.2	2.9	3.4	3.7	4.1	4.4	5.2	5.9
4.4	2.2	3.0	3.3	3.6	4.0	4.6	5.3
4.6	-	2.3	3.0	3.2	3.5	4.1	4.7
4.8	-	-	2.5	2.9	3.2	3.7	4.2
5.0	-	-	-	2.5	2.8	3.3	3.7
5.2	-	-	-	-	2.4	2.9	3.3
5.4	-	-	-	-	-	2.6	3.0
5.6	-	-	-	-	-	2.2	2.6
5.8	-	-	-	-	-	-	2.3
6.0	-	-	-	-	-	-	-

Factors affecting design (mixed phase)
(according to the color of the cargo value in the table):

x.x – Longitudinal shear stress (Vl,Rd)
x.x – Service arrow

The values in the table above (kN/m2) represent the characteristic value of all the additional actions to be applied to the composite slab in addition to its own weight.

Need for shoring (formwork phase)

- **No shoring required**
- **Need for a shoring line**
- Need for a shoring line

REDE MODERNA

RM76

COMPOSITE SLAB WITH PROFILE

Continuous slabs with thick profiled sheeting e = 1.0 mm

TABLE OF PERMISSIBLE LOADS (kN/m²)

Concrete class: C25/30

L = Distance between supports (m)	H = Total slab thicknes (cm)						
	12	13	14	15	16	18	20
1.4	22.1	24.6	27.1	29.5	32.0	36.9	41.9
1.6	18.8	20.9	23.0	25.1	27.2	31.4	35.6
1.8	16.2	18.0	19.8	21.7	23.5	27.1	30.7
2.0	14.9	15.8	17.4	18.9	20.5	23.7	26.9
2.2	14.1	14.6	15.3	16.7	18.1	21.0	23.8
2.4	12.0	13.4	14.3	14.9	16.2	18.7	21.2
2.6	10.3	11.5	12.7	13.9	14.5	16.8	19.0
2.8	9.0	10.0	11.0	12.1	13.1	15.2	17.2
3.0	7.8	8.8	9.7	10.6	11.5	13.3	15.2
3.2	6.9	7.7	8.5	9.4	10.2	11.8	13.4
3.4	6.1	6.9	7.6	8.3	9.0	10.5	11.9
3.6	5.5	6.1	6.8	7.4	8.0	9.3	10.6
3.8	4.9	5.5	6.1	6.6	7.2	8.4	9.5
4.0	4.4	4.9	5.4	6.0	6.5	7.5	8.6
4.2	4.0	4.4	4.9	5.4	5.8	6.8	7.7
4.4	3.6	4.0	4.4	4.8	5.3	6.1	7.0
4.6	3.2	3.6	4.0	4.4	4.8	5.6	6.3
4.8	2.9	3.3	3.6	4.0	4.3	5.0	5.7
5.0	2.6	3.0	3.3	3.6	3.9	4.6	5.2
5.2	2.4	2.7	3.0	3.3	3.6	4.2	4.7
5.4	2.2	2.4	2.7	3.0	3.2	3.8	4.3
5.6	-	2.2	2.5	2.7	2.9	3.4	3.9
5.8	-	-	2.2	2.5	2.7	3.1	3.6
6.0	-	-	-	2.2	2.4	2.8	3.2

Factors affecting design (mixed phase)
(according to the color of the cargo value in the table):

x.x – Longitudinal shear stress (Vl,Rd)
x.x – Service arrow

The values in the table above (kN/m2) represent the characteristic value of all the additional actions to be applied to the composite slab in addition to its own weight.

Need for shoring (formwork phase)

- **No shoring required**
- **Need for a shoring line**
- Need for a shoring line

REDE MODERNA

RM76

COMPOSITE SLAB WITH PROFILE

Simply supported composite slabs with thick profiled sheeting e = 1.2 mm

TABLE OF PERMISSIBLE LOADS (kN/m²)

Concrete class: C25/30

L = Distance between supports (m)	H = Total slab thicknes (cm)						
	12	13	14	15	16	18	20
1.4	30.9	34.4	38.0	41.5	45.1	51.0	54.7
1.6	24.1	26.8	29.6	32.4	35.2	40.7	46.3
1.8	19.3	21.5	23.8	26.0	28.2	32.7	37.2
2.0	15.8	17.7	19.5	21.3	23.2	26.9	30.5
2.2	13.2	14.7	16.3	17.8	19.4	22.4	25.5
2.4	11.2	12.5	13.8	15.1	16.4	19.0	21.6
2.6	9.6	10.7	11.8	12.9	14.0	16.3	18.5
2.8	8.3	9.2	10.2	11.2	12.1	14.1	16.0
3.0	7.2	8.0	8.9	9.7	10.6	12.2	13.9
3.2	6.3	7.0	7.8	8.5	9.3	10.7	12.2
3.4	5.5	6.2	6.8	7.5	8.2	9.5	10.8
3.6	4.9	5.5	6.0	6.6	7.2	8.4	9.5
3.8	4.3	4.8	5.4	5.9	6.4	7.4	8.5
4.0	3.8	4.3	4.8	5.2	5.7	6.6	7.6
4.2	3.4	3.8	4.3	4.7	5.1	5.9	6.7
4.4	2.5	3.4	3.8	4.2	4.5	5.3	6.0
4.6	-	2.7	3.4	3.7	4.1	4.7	5.4
4.8	-	-	2.9	3.3	3.6	4.2	4.8
5.0	-	-	2.1	3.0	3.2	3.8	4.3
5.2	-	-	-	2.2	2.9	3.4	3.9
5.4	-	-	-	-	2.9	3.0	3.5
5.6	-	-	-	-	-	2.7	3.1
5.8	-	-	-	-	-	2.4	2.8
6.0	-	-	-	-	-	-	2.4

Factors affecting design (mixed phase)
(according to the color of the cargo value in the table):

x.x – Longitudinal shear stress (Vl,Rd)
x.x – Service arrow
x.x - Service arrow

The values in the table above (kN/m2) represent the characteristic value of all the additional actions to be applied to the composite slab in addition to its own weight.

Need for shoring (formwork phase)

- **No shoring required**
- **Need for a shoring line**
- Need for a shoring line

REDE MODERNA

RM76

COMPOSITE SLAB WITH PROFILE

Continuous slabs with thick profiled sheeting e = 1.2 mm

TABLE OF PERMISSIBLE LOADS (kN/m²)

Concrete class: C25/30

L = Distance between supports (m)	H = Total slab thicknes (cm)						
	12	13	14	15	16	18	20
1.4	22.1	24.6	27.0	29.5	32.0	36.9	41.9
1.6	18.8	20.9	23.0	25.1	27.2	31.4	35.6
1.8	16.2	18.0	19.8	21.6	23.4	27.1	30.7
2.0	14.9	15.7	17.3	18.9	20.5	23.7	26.9
2.2	14.0	14.6	15.3	16.7	18.1	20.9	23.7
2.4	13.3	13.8	14.3	14.9	16.1	18.7	21.2
2.6	11.7	13.1	13.6	14.0	14.5	16.8	19.0
2.8	10.2	11.4	12.6	13.3	13.7	15.1	17.2
3.0	8.9	9.9	11.0	12.0	13.1	13.8	15.6
3.2	7.8	8.8	9.7	10.6	11.5	13.1	14.3
3.4	7.0	7.8	8.6	9.4	10.2	11.9	13.1
3.6	6.2	6.9	7.7	8.4	9.1	10.6	12.1
3.8	5.5	6.2	6.9	7.5	8.2	9.5	10.8
4.0	5.0	5.6	6.2	6.8	7.3	8.5	9.7
4.2	4.5	5.0	5.6	6.1	6.6	7.7	8.8
4.4	4.0	4.5	5.0	5.5	6.0	7.0	7.9
4.6	3.7	4.1	4.5	5.0	5.4	6.3	7.2
4.8	3.3	3.7	4.1	4.5	4.9	5.7	6.5
5.0	3.0	3.4	3.7	4.1	4.5	5.2	5.9
5.2	2.7	3.1	3.4	3.7	4.1	4.7	5.4
5.4	2.5	2.8	3.1	3.4	3.7	4.3	4.9
5.6	2.3	2.5	2.8	3.1	3.4	3.9	4.5
5.8	-	2.3	2.6	2.8	3.1	3.6	4.1
6.0	-	2.1	2.3	2.6	2.8	3.3	3.7

Factors affecting design (mixed phase)
(according to the color of the cargo value in the table):

x.x – Longitudinal shear stress (Vl,Rd)
x.x – Service arrow

The values in the table above (kN/m2) represent the characteristic value of all the additional actions to be applied to the composite slab in addition to its own weight.

Need for shoring (formwork phase)

- **No shoring required**
- **Need for a shoring line**
- Need for a shoring line