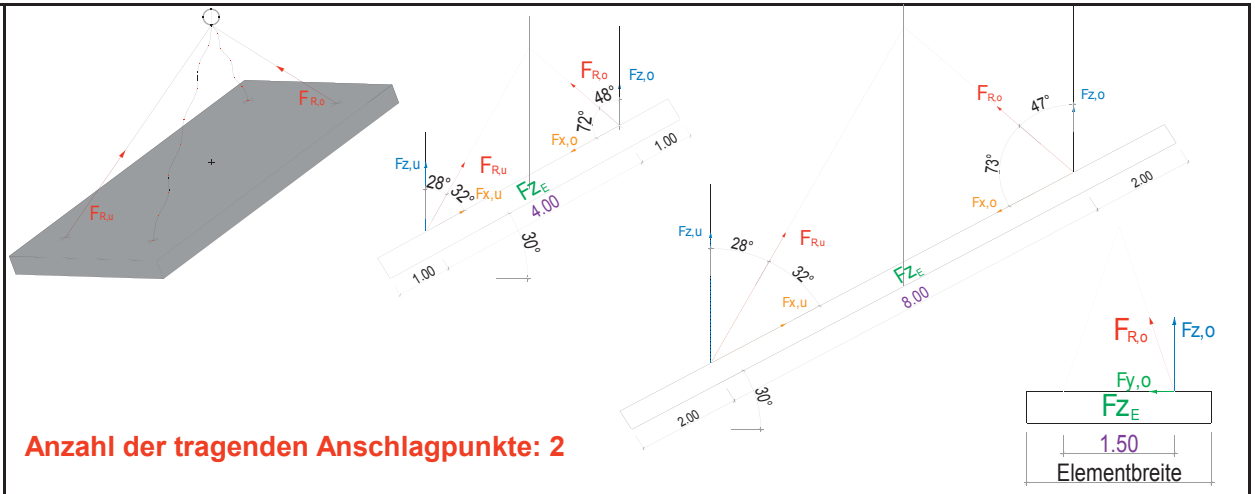


Hebelasten von Steildachelement

Charakteristischer Wert der Elementlast Fz-E [kN]

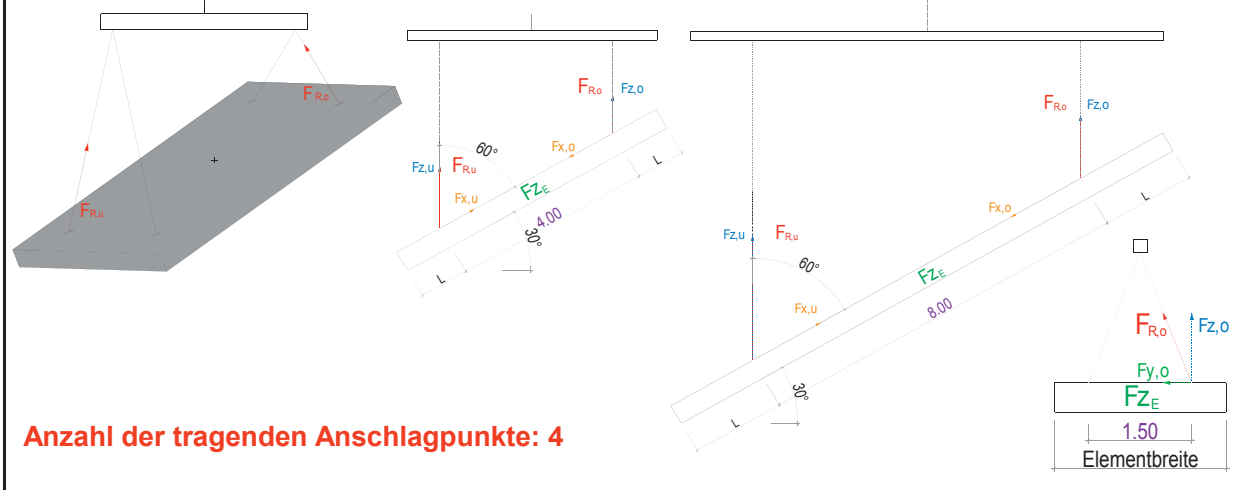


Material: Konterlattung 2 kg/m², Unterdachfolie 0.2 kg/m², Zusatzdämmung 240 kg/m³, Sparren 500 kg/m³, Hohlraumdämmung Zellulosefaser 60 kg/m³, Dreischichtplatte statisch verklebt 15 kg/m², Dampfbremse 0.2 kg/m², Installationsrost 2 kg/m² (a = 500 mm).

		Elementlänge [m]																					
		5.0		6.0		7.0		8.0		9.0		10.0		11.0		12.0		13.0		14.0			
Aufhängung F...		u	o	u	o	u	o	u	o	u	o	u	o	u	o	u	o	u	o	u	o		
Seillänge ca.=		4.0	2.3	4.0	2.3	4.0	2.3	4.0	2.3	4.0	2.3	8.0	4.5	8.0	4.5	8.0	4.5	8.0	4.5	8.0	4.5		
x =		4.0										8.0											
DN α =		30																					
		Elementbreite [m]																					
		0.50																					
		0.64																					
		0.76																					
		1.00																					
		2.00																					
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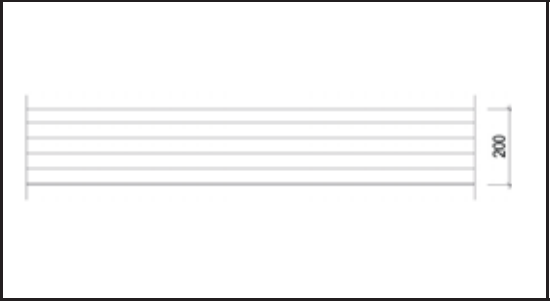
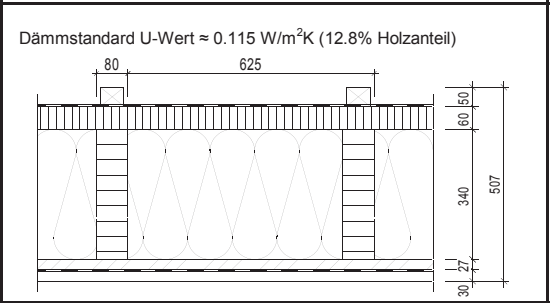
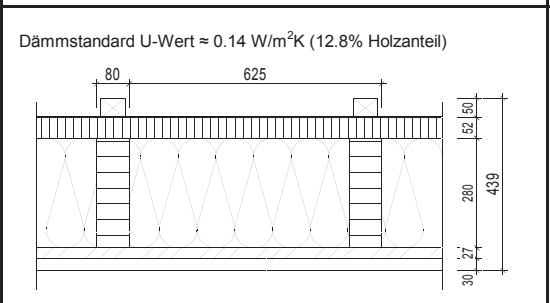
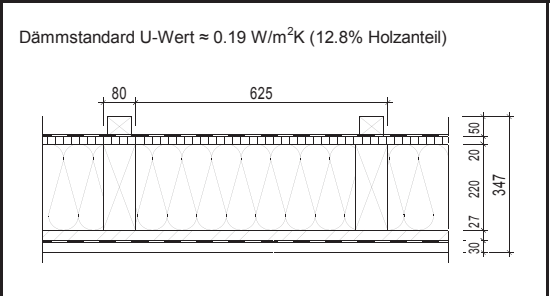
Hebelasten von Steildachelement

Charakteristischer Wert der Elementlast Fz-E [kN]



Anzahl der tragenden Anschlagpunkte: 4

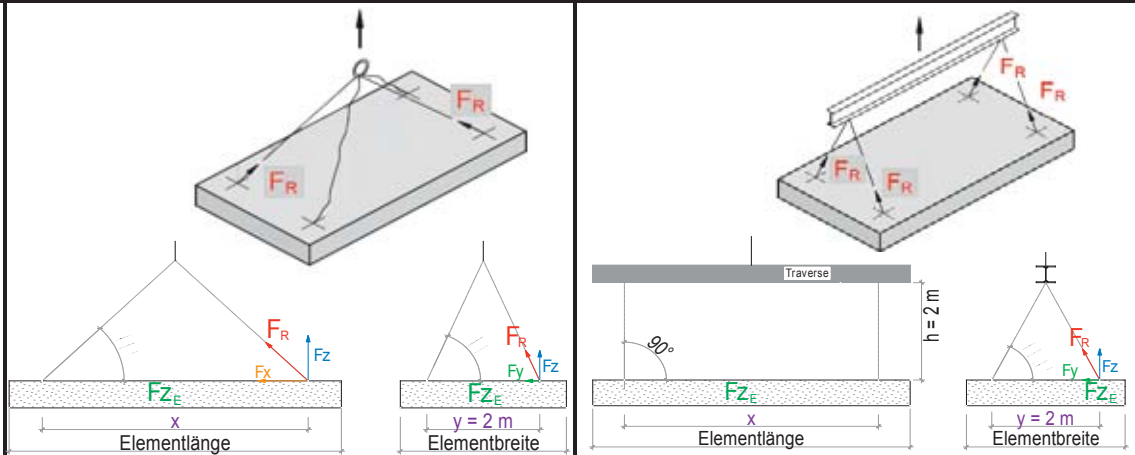
Material: Konterlattung 2 kg/m², Unterdachfolie 0.2 kg/m², Zusatzdämmung 240 kg/m³, Sparren 500 kg/m³, Hohlraumdämmung Zellulosefaser 60 kg/m³, Dreischichtplatte statisch verklebt 15 kg/m², Dampfbremse 0.2 kg/m², Installationsrost 2 kg/m² (a = 500 mm).



Elementlänge [m]	5.0		6.0		7.0		8.0		9.0		10.0		11.0		12.0		13.0		14.0				
	u	o	u	o	u	o	u	o	u	o	u	o	u	o	u	o	u	o	u	o			
Aufhängung F...	4.0	2.1	4.0	2.1	4.0	2.1	4.0	2.1	4.0	2.1	7.0	3.2	7.0	3.2	7.0	3.2	7.0	3.2	7.0	3.2			
Seillänge ca.=	4.0										8.0												
x =																							
DN α =	30																						
Elementgewicht [kN/m ²]	Elementbreite [m]	2	Fz-E	5.0	5.0	6.0	6.0	7.0	7.0	8.0	8.0	9.0	9.0	10.0	10.0	11.0	11.0	12.0	12.0	13.0	13.0	14.0	14.0
			Fz	1.3	1.3	1.5	1.5	1.8	1.8	2.0	2.0	2.3	2.3	2.5	2.5	2.8	2.8	3.0	3.0	3.3	3.3	3.5	3.5
			Fx	0.8	0.7	0.9	0.9	1.0	1.0	1.2	1.2	1.3	1.3	1.4	1.4	1.6	1.6	1.7	1.7	1.9	1.9	2.0	2.0
			Fy	0.3	0.6	0.3	0.7	0.4	0.8	0.4	0.9	0.5	1.0	0.3	0.7	0.3	0.8	0.4	0.9	0.4	0.9	0.4	1.0
Elementgewicht [kN/m ²]	Elementbreite [m]	2.5	Fz-E	6.3	6.3	7.5	7.5	8.8	8.8	10.0	10.0	11.3	11.3	12.5	12.5	13.8	13.8	15.0	15.0	16.3	16.3	17.5	17.5
			Fz	1.6	1.6	1.9	1.9	2.2	2.2	2.5	2.5	2.9	2.9	3.2	3.2	3.5	3.5	3.8	3.8	4.1	4.1	4.4	4.4
			Fx	0.9	0.9	1.1	1.1	1.3	1.3	1.4	1.4	1.7	1.7	1.8	1.8	2.0	2.0	2.2	2.2	2.4	2.4	2.5	2.5
			Fy	0.3	0.7	0.4	0.8	0.5	1.0	0.5	1.1	0.6	1.3	0.4	0.9	0.4	1.0	0.5	1.1	0.5	1.2	0.5	1.3
Elementgewicht [kN/m ²]	Elementbreite [m]	2	Fz-E	6.4	6.4	7.7	7.7	9.0	9.0	10.3	10.3	11.6	11.6	12.8	12.8	14.1	14.1	15.4	15.4	16.7	16.7	18.0	18.0
			Fz	1.6	1.6	2.0	2.0	2.3	2.3	2.6	2.6	2.9	2.9	3.2	3.2	3.6	3.6	3.9	3.9	4.2	4.2	4.5	4.5
			Fx	0.9	0.9	1.2	1.2	1.3	1.3	1.5	1.5	1.7	1.7	1.8	1.8	2.1	2.1	2.2	2.2	2.4	2.4	2.6	2.6
			Fy	0.3	0.7	0.4	0.9	0.5	1.0	0.6	1.1	0.6	1.3	0.4	0.9	0.4	1.0	0.5	1.1	0.5	1.2	0.6	1.3
Elementgewicht [kN/m ²]	Elementbreite [m]	2.5	Fz-E	8.0	8.0	9.6	9.6	11.2	11.2	12.8	12.8	14.4	14.4	16.0	16.0	17.6	17.6	19.2	19.2	20.8	20.8	22.4	22.4
			Fz	2.0	2.0	2.4	2.4	2.8	2.8	3.2	3.2	3.6	3.6	4.0	4.0	4.4	4.4	4.8	4.8	5.2	5.2	5.6	5.6
			Fx	1.2	1.2	1.4	1.4	1.6	1.6	1.8	1.8	2.1	2.1	2.3	2.3	2.5	2.5	2.8	2.8	3.0	3.0	3.2	3.2
			Fy	0.4	0.9	0.5	1.1	0.6	1.2	0.7	1.4	0.8	1.6	0.5	1.1	0.5	1.3	0.6	1.4	0.6	1.5	0.7	1.6
Elementgewicht [kN/m ²]	Elementbreite [m]	2	Fz-E	7.6	7.6	9.2	9.2	10.7	10.7	12.2	12.2	13.7	13.7	15.2	15.2	16.8	16.8	18.3	18.3	19.8	19.8	21.3	21.3
			Fz	1.9	1.9	2.3	2.3	2.7	2.7	3.1	3.1	3.5	3.5	3.8	3.8	4.2	4.2	4.6	4.6	5.0	5.0	5.4	5.4
			Fx	1.1	1.1	1.3	1.3	1.6	1.6	1.8	1.8	2.0	2.0	2.2	2.2	2.4	2.4	2.7	2.7	2.9	2.9	3.1	3.1
			Fy	0.4	0.8	0.5	1.0	0.6	1.2	0.7	1.4	0.8	1.5	0.5	1.1	0.5	1.2	0.6	1.3	0.6	1.4	0.7	1.5
Elementgewicht [kN/m ²]	Elementbreite [m]	2.5	Fz-E	9.5	9.5	11.4	11.4	13.3	13.3	15.2	15.2	17.1	17.1	19.0	19.0	20.9	20.9	22.8	22.8	24.7	24.7	26.6	26.6
			Fz	2.4	2.4	2.9	2.9	3.4	3.4	3.8	3.8	4.3	4.3	4.8	4.8	5.3	5.3	5.7	5.7	6.2	6.2	6.7	6.7
			Fx	1.4	1.4	1.7	1.7	2.0	2.0	2.2	2.2	2.5	2.5	2.8	2.8	3.1	3.1	3.3	3.3	3.6	3.6	3.9	3.9
			Fy	0.5	1.1	0.6	1.3	0.7	1.5	0.8	1.7	0.9	1.9	0.6	1.4	0.7	1.5	0.7	1.6	0.8	1.8	0.8	1.9
Elementgewicht [kN/m ²]	Elementbreite [m]	2	Fz-E	10.0	10.0	12.0	12.0	14.0	14.0	16.0	16.0	18.0	18.0	20.0	20.0	22.0	22.0	24.0	24.0	26.0	26.0	28.0	28.0
			Fz	2.5	2.5	3.0	3.0	3.5	3.5	4.0	4.0	4.5	4.5	5.0	5.0	5.5	5.5	6.0	6.0	6.5	6.5	7.0	7.0
			Fx	1.4	1.4	1.7	1.7	2.0	2.0	2.3	2.3	2.6	2.6	2.9	2.9	3.2	3.2	3.5	3.5	3.7	3.7	4.0	4.0
			Fy	0.5	1.1	0.7	1.3	0.8	1.5	0.9	1.8	1.0	2.0	0.6	1.4	0.7	1.6	0.7	1.7	0.8	1.9	0.9	2.0
Elementgewicht [kN/m ²]	Elementbreite [m]	2.5	Fz-E	12.5	12.5	15.0	15.0	17.5	17.5	20.0	20.0	22.5	22.5	25.0	25.0	27.5	27.5	30.0	30.0	32.5	32.5	35.0	35.0
			Fz	3.2	3.2	3.8	3.8	4.4	4.4	5.0	5.0	5.7	5.7	6.3	6.3	6.9	6.9	7.5	7.5	8.2	8.2	8.8	8.8
			Fx	1.8	1.8	2.2	2.2	2.5	2.5	2.9	2.9	3.3	3.3	3.6	3.6	4.0	4.0	4.3	4.3	4.7	4.7	5.1	5.1
			Fy	0.7	1.4	0.8	1.7	1.0	1.9	1.1	2.2	1.2	2.5	0.8	1.8	0.8	2.0	0.9	2.1	1.0	2.3	1.1	2.5

Hebelasten von Flachdachelementen

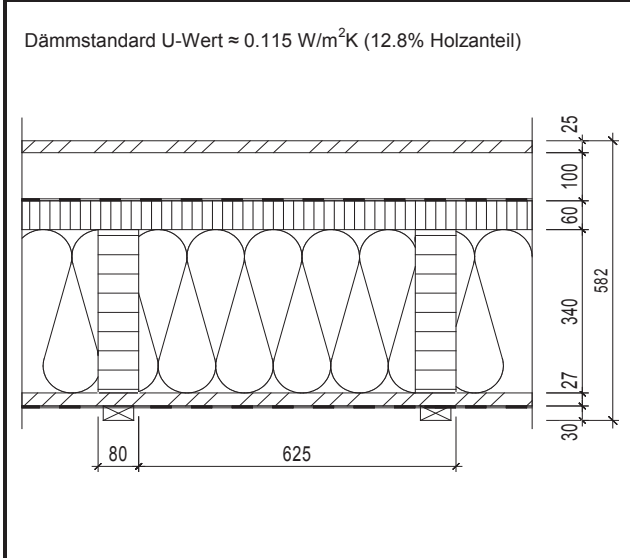
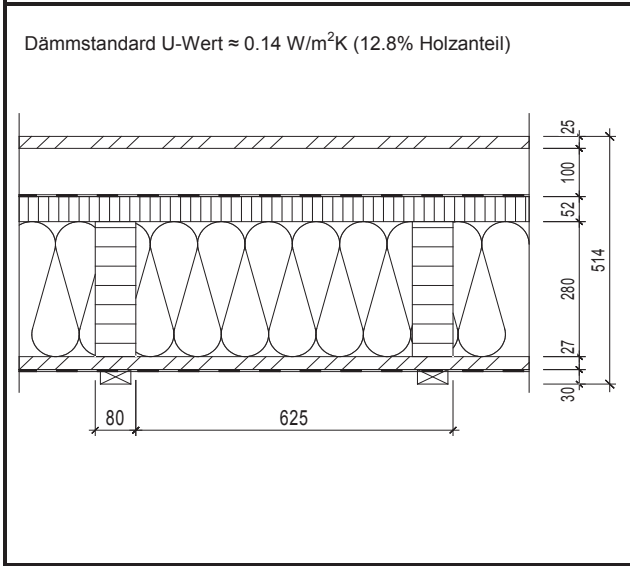
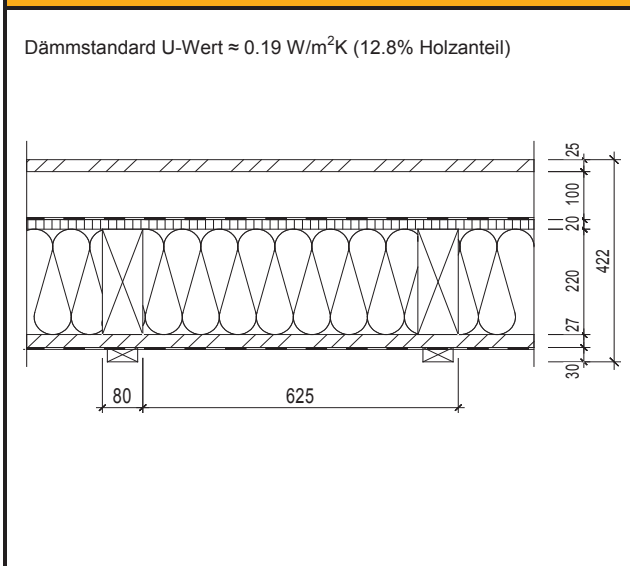
Charakteristischer Wert der Elementlast Fz-E [kN]



Anzahl der tragenden Anschlagpunkte: 2

Anzahl der tragenden Anschlagpunkte: 4

Material: OSB (25 mm) 15 kg/m², Hinterlüftungslattung 60/100 mm (a = 625 mm) 5 kg/m², Unterdachfolie 0.2 kg/m², Zusatzdämmung 240 kg/m³, Balken 500 kg/m³, Hohlraumdämmung Zellulosefaser 60 kg/m³, 3-Schichtplatte (27 mm) 15 kg/m², Dampfbremse 0.2 kg/m², Installationsrost 2 kg/m².



Elementlänge [m]	Elementlänge [m]												Elementlänge [m]											
	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	5.0	6.0		7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0			
x =	3	4	5	6	7	8	9	10	11	12	x =	3	4	5	6	7	8	9	10	11	12			
β1 =	56.3	63.4	68.2	71.6	74.1	76.0	77.5	78.7	79.7	80.5	β1 =	63.4												
Elementbreite [m]	0.66												0.76											
	0.66												0.76											
Elementgewicht [kN/m ²]	2												2.5											
	2												2.5											
Elementgewicht [kN/m ²]	3												3.5											
	3												3.5											
Elementgewicht [kN/m ²]	2												2.5											
	2												2.5											
Elementgewicht [kN/m ²]	3												3.5											
	3												3.5											
Elementgewicht [kN/m ²]	2												2.5											
	2												2.5											
Elementgewicht [kN/m ²]	3												3.5											
	3												3.5											
Elementgewicht [kN/m ²]	2												2.5											
	2												2.5											
Elementgewicht [kN/m ²]	3												3.5											
	3												3.5											

Bemerkung - Aufhängung ohne Traverse:
Die Elementlast Fz-E wird nur von zwei Anschlagpunkten getragen,
Fz = Fx = 0.5*Fz-E

Bemerkung - Aufhängung mit Traverse:
Die Elementlast Fz-E wird von vier Anschlagpunkten getragen,
Fz = 0.25*Fz-E