EXPAN Lyddæk rumvægt 2000 kg/m³ - bæreevnetabel 180 og 200 mm

EXPAN A/S, september 2020

1. linie Max. regn. mæss. bæreevne i kN/m2 (excl. egenlast) ved jævnt fordelt last
2. linie Bæreevne i kN/m2 (excl. egenlast) ved langtidsnedbøjning < 1/300 af lysvidden
3. linie Max. karakt. bæreevne i kN/m² (excl. egenlast) ved jævnt fordelt last som bygningsdel klasse R 60 A1

Element type	Egen-last kN/m²	Vd max kN/m	Md max kNm/m	Vk R 60 A1 kN/m	Mk R 60 A1 kNm/m	Fri afstand mellem understøtningerne i mm (lysvidde) samt pilhøjde på støbeform i mm																				
		Tværsnits-kapaciteter incl. egenlast				2800	3000	3200	3400	3600	3800	4000	4200	4400	4600	4800	5000	5200	5400	5600	5800	6000	6200	6400	6600	6800	7000
						3,8	4,3	4,9	5,6	6,2	6,9	7,7	8,4	9,2	10,1	11,0	11,9	12,8	13,8	14,9	15,9	17,0	18,2	19,4	20,6	21,8	23,1
180/50		61,83	23,79			**19,58**	**16,66**	**14,25**	**12,25**	**10,57**	**9,14**	**7,92**	**6,86**	**5,94**	**5,14**	**4,44**	**3,82**	**3,26**	**2,77**								
						15,60	12,61	10,24	8,35	6,81	5,55	4,49	3,61	2,86	2,22	1,67	1,19	0,78	0,41								
				98,92	*16,60*	*12,58*	*10,54*	*8,86*	*7,46*	*6,29*	*5,29*	*4,44*	*3,70*	*3,06*	*2,50*	*2,01*	*1,58*	*1,19*	*0,85*								
180/51		62,22	27,50			**23,21**	**19,82**	**17,04**	**14,73**	**12,78**	**11,13**	**9,72**	**8,50**	**7,44**	**6,51**	**5,70**	**4,98**	**4,34**	**3,77**	**3,26**							
						17,17	13,90	11,32	9,26	7,59	6,22	5,07	4,12	3,31	2,62	2,02	1,51	1,06	0,67	0,32							
				99,55	*20,26*	*16,14*	*13,65*	*11,60*	*9,90*	*8,46*	*7,25*	*6,21*	*5,31*	*4,53*	*3,85*	*3,25*	*2,72*	*2,25*	*1,83*	*1,45*							
180/52		63,83	36,10			**31,58**	**27,14**	**23,49**	**20,45**	**17,90**	**15,73**	**13,88**	**12,27**	**10,88**	**9,67**	**8,60**	**7,66**	**6,82**	**6,07**	**5,40**	**4,79**						
						20,96	17,02	13,94	11,47	9,48	7,84	6,49	5,35	4,40	3,58	2,88	2,28	1,75	1,29	0,89	0,53						
				102,12	*26,79*	*22,51*	*19,22*	*16,51*	*14,25*	*12,36*	*10,75*	*9,37*	*8,18*	*7,15*	*6,25*	*5,46*	*4,76*	*4,13*	*3,58*	*3,08*	*2,63*						
180/53	3,60	66,35	50,18			**42,71**	**39,13**	**34,05**	**29,83**	**26,28**	**23,27**	**20,69**	**18,47**	**16,53**	**14,84**	**13,36**	**12,05**	**10,88**	**9,84**	**8,91**	**8,07**	**7,31**	**6,63**				
						26,48	21,59	17,76	14,71	12,25	10,23	8,57	7,18	6,00	5,01	4,15	3,42	2,78	2,22	1,73	1,30	0,92	0,58				
				106,15	*39,59*	*34,99*	*30,12*	*26,11*	*22,78*	*19,98*	*17,60*	*15,57*	*13,81*	*12,29*	*10,95*	*9,78*	*8,75*	*7,83*	*7,01*	*6,27*	*5,61*	*5,01*	*4,47*				
180/54		68,66	61,23			**44,33**	**41,20**	**38,46**	**36,03**	**32,87**	**29,19**	**26,04**	**23,33**	**20,97**	**18,91**	**17,10**	**15,49**	**14,07**	**12,80**	**11,66**	**10,64**	**9,72**	**8,88**	**8,12**	**7,43**		
						30,64	25,05	20,66	17,17	14,36	12,06	10,16	8,57	7,23	6,10	5,13	4,29	3,57	2,93	2,38	1,89	1,46	1,07	0,73	0,42		
				109,86	*48,88*	*44,04*	*38,03*	*33,08*	*28,97*	*25,51*	*22,58*	*20,07*	*17,90*	*16,01*	*14,37*	*12,92*	*11,64*	*10,51*	*9,49*	*8,59*	*7,77*	*7,03*	*6,36*	*5,76*	*5,20*		
180/55		70,98	71,68			**45,95**	**42,72**	**39,88**	**37,37**	**35,13**	**33,13**	**31,10**	**27,93**	**25,17**	**22,75**	**20,63**	**18,75**	**17,09**	**15,60**	**14,27**	**13,07**	**11,99**	**11,01**	**10,12**	**9,31**	**8,57**	
						34,38	28,14	23,26	19,38	16,25	13,70	11,58	9,82	8,34	7,08	6,01	5,08	4,28	3,58	2,97	2,43	1,95	1,52	1,14	0,80	0,50	
				113,57	*57,93*	*52,86*	*45,73*	*39,87*	*35,00*	*30,90*	*27,42*	*24,44*	*21,88*	*19,64*	*17,69*	*15,98*	*14,46*	*13,12*	*11,92*	*10,84*	*9,87*	*9,00*	*8,21*	*7,49*	*6,83*	*6,23*	
200/51		68,43	31,10			**26,31**	**22,49**	**19,34**	**16,72**	**14,52**	**12,66**	**11,06**	**9,68**	**8,48**	**7,43**	**6,51**	**5,70**	**4,98**	**4,33**	**3,75**	**3,23**	**2,76**					
						22,77	18,54	15,20	12,54	10,38	8,61	7,13	5,90	4,86	3,97	3,20	2,54	1,96	1,46	1,02	0,62	0,27					
				109,49	*22,85*	*18,27*	*15,46*	*13,15*	*11,22*	*9,61*	*8,24*	*7,06*	*6,05*	*5,17*	*4,40*	*3,72*	*3,12*	*2,59*	*2,12*	*1,70*	*1,31*	*0,97*					
200/52		70,02	40,90			**35,86**	**30,83**	**26,69**	**23,25**	**20,36**	**17,90**	**15,80**	**13,99**	**12,41**	**11,03**	**9,82**	**8,75**	**7,80**	**6,95**	**6,19**	**5,51**	**4,89**	**4,34**				
						27,85	22,73	18,72	15,51	12,92	10,80	9,04	7,57	6,32	5,27	4,36	3,58	2,90	2,30	1,78	1,32	0,91	0,55				
				112,03	*30,25*	*25,48*	*21,76*	*18,70*	*16,16*	*14,02*	*12,20*	*10,65*	*9,30*	*8,14*	*7,12*	*6,22*	*5,43*	*4,73*	*4,10*	*3,54*	*3,04*	*2,58*	*2,17*				
200/53	4,00	72,50	57,09			**46,61**	**43,31**	**38,84**	**34,04**	**30,00**	**26,57**	**23,64**	**21,11**	**18,91**	**16,99**	**15,30**	**13,80**	**12,48**	**11,29**	**10,23**	**9,28**	**8,42**	**7,64**	**6,93**	**6,28**	**5,69**	
						35,38	28,97	23,94	19,94	16,71	14,07	11,89	10,06	8,53	7,22	6,11	5,14	4,31	3,58	2,94	2,37	1,88	1,43	1,03	0,68	0,36	
				116,01	*44,82*	*39,68*	*34,17*	*29,63*	*25,86*	*22,69*	*20,00*	*17,70*	*15,71*	*13,98*	*12,48*	*11,15*	*9,98*	*8,93*	*8,00*	*7,17*	*6,42*	*5,75*	*5,13*	*4,58*	*4,07*	*3,61*	
200/54		74,79	69,87			**48,21**	**44,80**	**41,81**	**39,17**	**36,81**	**33,42**	**29,83**	**26,73**	**24,04**	**21,68**	**19,62**	**17,79**	**16,16**	**14,71**	**13,42**	**12,25**	**11,20**	**10,24**	**9,37**	**8,58**	**7,86**	**7,20**
						41,06	33,68	27,90	23,30	19,59	16,56	14,06	11,97	10,21	8,72	7,44	6,34	5,39	4,56	3,83	3,19	2,62	2,11	1,66	1,26	0,89	0,57
				119,66	*55,41*	*50,01*	*43,19*	*37,58*	*32,92*	*29,00*	*25,68*	*22,83*	*20,37*	*18,24*	*16,37*	*14,73*	*13,28*	*11,99*	*10,84*	*9,81*	*8,89*	*8,05*	*7,29*	*6,61*	*5,98*	*5,41*	*4,88*
200/55		77,07	82,05			**49,80**	**46,29**	**43,21**	**40,49**	**38,06**	**35,88**	**33,92**	**32,09**	**28,93**	**26,16**	**23,73**	**21,59**	**19,68**	**17,98**	**16,45**	**15,08**	**13,84**	**12,72**	**11,70**	**10,78**	**9,93**	**9,15**
						46,18	37,93	31,47	26,33	22,19	18,81	16,02	13,69	11,73	10,07	8,65	7,43	6,37	5,44	4,64	3,92	3,29	2,73	2,23	1,79	1,38	1,02
				123,32	*65,76*	*60,10*	*52,00*	*45,35*	*39,82*	*35,17*	*31,22*	*27,84*	*24,92*	*22,39*	*20,18*	*18,23*	*16,51*	*14,98*	*13,62*	*12,39*	*11,29*	*10,30*	*9,40*	*8,59*	*7,84*	*7,16*	*6,54*

EXPAN Lyddæk rumvægt 2000 kg/m³ - bæreevnetabel 220 og 240 mm

EXPAN A/S, september 2020

Element type	Egen-last kN/m²	Vd max kN/m	Md max kNm/m	Vk R 60 A1 kN/m	Mk R 60 A1 kNm/m	1. linie: Max. regn. mæss. bæreevne i kN/m2 (excl. egenlast) ved jævnt fordelt last 2. linie: Bæreevne i kN/m2 (excl. egenlast) ved langtidsnedbøjning < 1/300 af lysvidden 3. linie: Max. karakt. bæreevne i kN/m² (excl. egenlast) ved jævnt fordelt last som bygningsdel klasse R 60 A1																				
		Tværsnits-kapaciteter incl. egenlast				Fri afstand mellem understøtningerne i mm (lysvidde) samt pilhøjde på støbeform i mm																		
						2800	3000	3200	3400	3600	3800	4000	4200	4400	4600	4800	5000	5200	5400	5600	5800	6000	6200	6400	6600	6800	7000
						3,8	4,3	4,9	5,6	6,2	6,9	7,7	8,4	9,2	10,1	11,0	11,9	12,8	13,8	14,9	15,9	17,0	18,2	19,4	20,6	21,8	23,1
220/51		74,44	34,70			**29,42**	**25,15**	**21,64**	**18,72**	**16,27**	**14,18**	**12,40**	**10,86**	**9,53**	**8,36**	**7,33**	**6,42**	**5,62**	**4,90**	**4,25**	**3,67**	**3,15**	**2,67**				
						29,19	23,86	19,66	16,32	13,60	11,37	9,53	7,98	6,67	5,55	4,59	3,76	3,04	2,41	1,85	1,36	0,93	0,54				
				119,11	*25,44*	*20,39*	*17,26*	*14,69*	*12,55*	*10,75*	*9,22*	*7,92*	*6,79*	*5,81*	*4,95*	*4,20*	*3,53*	*2,94*	*2,41*	*1,94*	*1,52*	*1,13*	*0,78*				
220/52		76,01	45,70			**40,14**	**34,51**	**29,89**	**26,05**	**22,82**	**20,07**	**17,72**	**15,70**	**13,94**	**12,40**	**11,05**	**9,85**	**8,79**	**7,84**	**6,99**	**6,23**	**5,54**	**4,91**	**4,35**	**3,83**		
						35,77	29,30	24,22	20,17	16,90	14,22	12,00	10,14	8,58	7,24	6,10	5,12	4,26	3,51	2,85	2,27	1,76	1,30	0,89	0,52		
				121,61	*33,71*	*28,45*	*24,30*	*20,89*	*18,06*	*15,67*	*13,65*	*11,92*	*10,42*	*9,13*	*7,99*	*6,99*	*6,11*	*5,33*	*4,63*	*4,00*	*3,44*	*2,93*	*2,47*	*2,05*	*1,67*		
220/53	4,40	78,46	64,00			**50,37**	**46,80**	**43,63**	**38,24**	**33,72**	**29,87**	**26,58**	**23,75**	**21,28**	**19,13**	**17,23**	**15,56**	**14,07**	**12,74**	**11,55**	**10,48**	**9,52**	**8,64**	**7,85**	**7,13**	**6,46**	**5,86**
						45,67	37,50	31,10	26,00	21,89	18,53	15,75	13,44	11,48	9,82	8,40	7,18	6,12	5,19	4,38	3,67	3,03	2,47	1,96	1,51	1,11	0,74
				125,54	*50,04*	*44,37*	*38,21*	*33,15*	*28,94*	*25,40*	*22,40*	*19,83*	*17,61*	*15,68*	*14,00*	*12,51*	*11,21*	*10,04*	*9,00*	*8,07*	*7,24*	*6,48*	*5,80*	*5,18*	*4,61*	*4,09*	*3,62*
220/54		80,72	78,51			**51,95**	**48,27**	**45,04**	**42,19**	**39,65**	**37,37**	**33,61**	**30,13**	**27,10**	**24,46**	**22,14**	**20,08**	**18,26**	**16,63**	**15,17**	**13,86**	**12,67**	**11,60**	**10,63**	**9,74**	**8,93**	**8,18**
						53,14	43,69	36,30	30,42	25,68	21,81	18,61	15,94	13,70	11,79	10,16	8,76	7,54	6,48	5,55	4,74	4,01	3,37	2,79	2,28	1,82	1,40
				129,15	*61,94*	*55,97*	*48,35*	*42,09*	*36,87*	*32,49*	*28,77*	*25,59*	*22,84*	*20,46*	*18,37*	*16,54*	*14,92*	*13,48*	*12,19*	*11,04*	*10,01*	*9,07*	*8,23*	*7,46*	*6,76*	*6,11*	*5,53*
220/55		82,97	92,42			**53,52**	**49,74**	**46,42**	**43,49**	**40,88**	**38,53**	**36,42**	**34,51**	**32,69**	**29,57**	**26,84**	**24,42**	**22,27**	**20,36**	**18,64**	**17,09**	**15,70**	**14,44**	**13,29**	**12,24**	**11,29**	**10,41**
						59,90	49,31	41,02	34,43	29,12	24,79	21,21	18,23	15,72	13,59	11,77	10,20	8,84	7,66	6,63	5,71	4,91	4,19	3,55	2,98	2,46	2,00
				132,75	*73,60*	*67,33*	*58,28*	*50,83*	*44,64*	*39,44*	*35,02*	*31,23*	*27,97*	*25,13*	*22,66*	*20,48*	*18,55*	*16,84*	*15,32*	*13,95*	*12,72*	*11,61*	*10,60*	*9,69*	*8,85*	*8,09*	*7,40*
240/52		81,79	50,50			**44,41**	**38,20**	**33,09**	**28,85**	**25,27**	**22,24**	**19,65**	**17,41**	**15,46**	**13,76**	**12,27**	**10,95**	**9,77**	**8,73**	**7,79**	**6,94**	**6,18**	**5,49**	**4,87**	**4,29**	**3,77**	**3,29**
						44,74	36,75	30,47	25,47	21,43	18,12	15,38	13,09	11,16	9,51	8,11	6,89	5,84	4,91	4,10	3,39	2,76	2,19	1,69	1,23	0,83	0,46
				130,87	*37,16*	*31,42*	*26,85*	*23,09*	*19,96*	*17,33*	*15,10*	*13,19*	*11,54*	*10,11*	*8,86*	*7,76*	*6,79*	*5,92*	*5,15*	*4,46*	*3,84*	*3,28*	*2,77*	*2,31*	*1,89*	*1,51*	*1,16*
240/53	4,80	84,22	70,91			**54,00**	**50,16**	**46,79**	**42,45**	**37,43**	**33,17**	**29,53**	**26,39**	**23,65**	**21,27**	**19,17**	**17,31**	**15,66**	**14,19**	**12,88**	**11,69**	**10,62**	**9,65**	**8,77**	**7,97**	**7,24**	**6,57**
						57,37	47,20	39,25	32,91	27,80	23,63	20,18	17,30	14,87	12,81	11,05	9,53	8,22	7,07	6,06	5,17	4,39	3,69	3,07	2,51	2,00	1,55
				134,76	*55,27*	*49,06*	*42,26*	*36,68*	*32,03*	*28,12*	*24,80*	*21,96*	*19,51*	*17,38*	*15,52*	*13,88*	*12,43*	*11,15*	*10,00*	*8,98*	*8,05*	*7,22*	*6,46*	*5,78*	*5,15*	*4,58*	*4,06*
240/54		86,45	87,15			**55,55**	**51,61**	**48,15**	**45,10**	**42,37**	**39,93**	**37,39**	**33,53**	**30,17**	**27,24**	**24,66**	**22,38**	**20,35**	**18,54**	**16,92**	**15,47**	**14,15**	**12,96**	**11,88**	**10,89**	**9,99**	**9,17**
						66,90	55,11	45,89	38,56	32,65	27,82	23,83	20,51	17,71	15,33	13,30	11,56	10,04	8,72	7,56	6,54	5,64	4,84	4,13	3,49	2,91	2,39
				138,31	*68,47*	*61,94*	*53,51*	*46,59*	*40,83*	*35,98*	*31,87*	*28,35*	*25,32*	*22,68*	*20,37*	*18,34*	*16,55*	*14,96*	*13,54*	*12,27*	*11,13*	*10,09*	*9,16*	*8,31*	*7,53*	*6,82*	*6,17*
240/55		88,67	102,79			**57,10**	**53,06**	**49,51**	**46,38**	**43,59**	**41,08**	**38,82**	**36,78**	**34,92**	**32,99**	**29,94**	**27,25**	**24,86**	**22,73**	**20,82**	**19,10**	**17,55**	**16,15**	**14,87**	**13,71**	**12,65**	**11,67**
						75,56	62,31	51,94	43,70	37,06	31,64	27,17	23,44	20,30	17,64	15,36	13,41	11,71	10,24	8,94	7,80	6,80	5,90	5,10	4,39	3,75	3,17
				141,87	*81,44*	*74,57*	*64,55*	*56,32*	*49,46*	*43,70*	*38,81*	*34,63*	*31,02*	*27,88*	*25,14*	*22,73*	*20,60*	*18,70*	*17,01*	*15,50*	*14,14*	*12,91*	*11,80*	*10,79*	*9,87*	*9,02*	*8,25*

EXPAN Lyddæk rumvægt 2000 kg/m³ - udkragning

EXPAN A/S, september 2020

Element type	Egen-last kN/m²	Vd max kN/m	Md max kNm/m
		Tværsnitskapciteter incl. egenlast	
180/50	3,60	50,15	18,26
200/50	4,00	56,72	21,33
220/50	4,40	63,09	24,40
240/50	4,80	69,26	27,47
260/50	5,20	75,23	30,54

Expan Lyddæk kan produceres med en bærende armering i elementoverside svarende til armeringskode 30. Længde af udkragning max. 1200 mm og min. elementtykkelse 180 mm. Armeringen føres så langt tilbage på det simple spænd, at det maksimale regnings-mæssige moment af udkragningen udbalanceres af elementegenlasten.

Anvendelsen af udkragning er begræn-set til passivt miljø. På grund af støbe-formens pilhøjde vil den udkragede del fra starten ikke være vandret. Der bør i det enkelte tilfælde udføres en beregning af deformationerne som vurderingsgrundlag for disses konse-kvens for de øvrige konstruktioner.