

Appendixes

Appendix A

Formdeck (FD300) Design Positive Moment Capacity,

$$\phi M_{uo}^{+}$$

Table A.1 Formdeck (FD300) BMT 1.00mm Design Positive Momenet Capacity, ϕM^*_{uo} (kNm/m)

D _c (mm)	$t_{fm} = 1.00 \text{ mm}; f'_c = 25 \text{ MPa}$					$t_{fm} = 1.00 \text{ mm}; f'_c = 32 \text{ MPa}$				
	Values of ϕM^*_{uo} for $\beta_1 =$					Values of ϕM^*_{uo} for $\beta_1 =$				
	0.2	0.4	0.6	0.8	1.0	0.2	0.4	0.6	0.8	1.0
100	18.5	29.9	38.6	43.5	45.3	18.6	30.4	39.7	45.5	48.4
110	19.9	32.7	42.8	49.1	52.2	20.0	33.2	43.9	51.1	55.3
120	21.3	35.5	46.9	54.7	59.2	21.4	36.0	48.0	56.7	62.3
130	22.7	38.3	51.1	60.2	66.1	22.8	38.8	52.2	62.2	69.2
140	24.0	41.0	55.3	65.8	73.1	24.2	41.5	56.4	67.8	76.2
150	25.4	43.8	59.5	71.4	80.0	25.6	44.3	60.6	73.4	83.2
160	26.8	46.6	63.6	76.9	87.0	27.0	47.1	64.7	78.9	90.1
170	28.2	49.4	67.8	82.5	94.0	28.3	49.9	68.9	84.5	97.1
180	29.6	52.2	72.0	88.1	100.9	29.7	52.7	73.1	90.1	104.0
190	31.0	55.0	76.2	93.6	107.9	31.1	55.5	77.3	95.6	111.0
200	32.4	57.7	80.3	99.2	114.8	32.5	58.2	81.4	101.2	118.0
210	33.8	60.5	84.5	104.8	121.8	33.9	61.0	85.6	106.8	124.9
220	35.2	63.3	88.7	110.3	128.8	35.3	63.8	89.8	112.3	131.9
230	36.6	66.1	92.9	115.9	135.7	36.7	66.6	94.0	117.9	138.8
240	38.0	68.9	97.0	121.5	142.7	38.1	69.4	98.1	123.5	145.8
250	39.4	71.7	101.2	127.0	149.6	39.5	72.2	102.3	129.0	152.7

Table A.2 Formdeck (FD300) BMT 0.90mm Design Positive Moment Capacity, ϕM^*_{uo} (kNm/m)

D_c (mm)	$f_{cm} = 0.90 \text{ mm}; f_c = 25 \text{ MPa}$					$f_{cm} = 0.90 \text{ mm}; f_c = 32 \text{ MPa}$				
	Values of ϕM^*_{uo} for $\beta_1 =$					Values of ϕM^*_{uo} for $\beta_1 =$				
	0.2	0.4	0.6	0.8	1.0	0.2	0.4	0.6	0.8	1.0
100	16.8	27.3	35.3	40.1	42.1	16.9	27.7	36.3	41.7	44.6
110	18.1	29.8	39.1	45.1	48.3	18.2	30.2	40.0	46.8	50.9
120	19.4	32.3	42.9	50.2	54.6	19.5	32.7	43.8	51.8	57.2
130	20.6	34.8	46.6	55.2	60.9	20.7	35.2	47.6	56.8	63.4
140	21.9	37.3	50.4	60.2	67.2	22.0	37.7	51.3	61.8	69.7
150	23.1	39.8	54.2	65.2	73.4	23.2	40.2	55.1	66.8	76.0
160	24.4	42.4	57.9	70.2	79.7	24.5	42.8	58.8	71.9	82.3
170	25.6	44.9	61.7	75.3	86.0	25.7	45.3	62.6	76.9	88.5
180	26.9	47.4	65.5	80.3	92.3	27.0	47.8	66.4	81.9	94.8
190	28.1	49.9	69.2	85.3	98.5	28.2	50.3	70.1	86.9	101.1
200	29.4	52.4	73.0	90.3	104.8	29.5	52.8	73.9	91.9	107.4
210	30.6	54.9	76.8	95.3	111.1	30.7	55.3	77.7	97.0	113.6
220	31.9	57.4	80.5	100.4	117.4	32.0	57.8	81.4	102.0	119.9
230	33.2	59.9	84.3	105.4	123.6	33.3	60.3	85.2	107.0	126.2
240	34.4	62.4	88.1	110.4	129.9	34.5	62.8	89.0	112.0	132.5
250	35.7	64.9	91.8	115.4	136.2	35.8	65.3	92.7	117.0	138.7

Table A.3 Formdeck (FD300) BMT 0.75mm Design Positive Moment Capacity, ϕM^*_{uo} (kNm/m)

D_c (mm)	$t_{bm} = 0.75 \text{ mm}; f_c = 25 \text{ MPa}$										$t_{bm} = 0.75 \text{ mm}; f_c = 32 \text{ MPa}$									
	Values of ϕM^*_{uo} for $\beta_f =$										Values of ϕM^*_{uo} for $\beta_f =$									
	0.2	0.4	0.6	0.8	1.0	0.2	0.4	0.6	0.8	1.0	0.2	0.4	0.6	0.8	1.0	0.2	0.4	0.6	0.8	1.0
100	13.3	22.2	29.4	34.1	36.8	13.3	22.5	30.1	35.3	38.5	13.3	22.5	30.1	35.3	38.5	13.3	22.5	30.1	35.3	38.5
110	14.3	24.3	32.6	38.3	42.0	14.4	24.6	33.2	39.4	43.8	14.4	24.6	33.2	39.4	43.8	14.4	24.6	33.2	39.4	43.8
120	15.4	26.4	35.7	42.5	47.2	15.4	26.7	36.3	43.6	49.0	15.4	26.7	36.3	43.6	49.0	15.4	26.7	36.3	43.6	49.0
130	16.4	28.5	38.9	46.7	52.5	16.5	28.8	39.5	47.8	54.3	16.5	28.8	39.5	47.8	54.3	16.5	28.8	39.5	47.8	54.3
140	17.5	30.6	42.0	50.9	57.7	17.5	30.9	42.6	52.0	59.5	17.5	30.9	42.6	52.0	59.5	17.5	30.9	42.6	52.0	59.5
150	18.5	32.7	45.2	55.1	63.0	18.6	33.0	45.8	56.2	64.7	18.6	33.0	45.8	56.2	64.7	18.6	33.0	45.8	56.2	64.7
160	19.6	34.8	48.3	59.3	68.2	19.6	35.1	48.9	60.4	70.0	19.6	35.1	48.9	60.4	70.0	19.6	35.1	48.9	60.4	70.0
170	20.6	36.9	51.4	63.5	73.5	20.7	37.2	52.1	64.6	75.2	20.7	37.2	52.1	64.6	75.2	20.7	37.2	52.1	64.6	75.2
180	21.7	39.0	54.6	67.7	78.7	21.7	39.3	55.2	68.8	80.5	21.7	39.3	55.2	68.8	80.5	21.7	39.3	55.2	68.8	80.5
190	22.7	41.1	57.7	71.9	84.0	22.8	41.4	58.4	73.0	85.7	22.8	41.4	58.4	73.0	85.7	22.8	41.4	58.4	73.0	85.7
200	23.8	43.2	60.9	76.1	89.2	23.8	43.5	61.5	77.2	91.0	23.8	43.5	61.5	77.2	91.0	23.8	43.5	61.5	77.2	91.0
210	24.8	45.3	64.0	80.3	94.4	24.9	45.6	64.7	81.4	96.2	24.9	45.6	64.7	81.4	96.2	24.9	45.6	64.7	81.4	96.2
220	25.8	47.4	67.2	84.5	99.7	25.9	47.7	67.8	85.6	101.5	25.9	47.7	67.8	85.6	101.5	25.9	47.7	67.8	85.6	101.5
230	26.9	49.5	70.3	88.7	104.9	27.0	49.8	71.0	89.8	106.7	27.0	49.8	71.0	89.8	106.7	27.0	49.8	71.0	89.8	106.7
240	27.9	51.6	73.5	92.9	110.2	28.0	51.9	74.1	94.0	111.9	28.0	51.9	74.1	94.0	111.9	28.0	51.9	74.1	94.0	111.9
250	29.0	53.7	76.6	97.1	115.4	29.1	54.0	77.3	98.2	117.2	29.1	54.0	77.3	98.2	117.2	29.1	54.0	77.3	98.2	117.2

Appendix B

FORMDECK FD300 Design Positive Vertical Shear Capacity V_{uc}^+

Table B.1 FORMDECK FD300 Design Positive Vertical Shear Capacity V^*_{uc} (kN/m)

D_c (mm)	$t_{cm} = 1.00$ mm		$t_{cm} = 0.90$ mm		$t_{cm} = 0.75$ mm	
	Values of ϕV^*_{uc} for $\mu =$		Values of ϕV^*_{uc} for $\mu =$		Values of ϕV^*_{uc} for $\mu =$	
	0.00	0.42	0.00	0.42	0.00	0.42
100	53.5	74.4	51.0	70.8	39.8	55.3
110	52.3	72.6	49.9	69.3	39.7	55.2
120	51.5	71.5	49.4	68.5	40.0	55.6
130	51.1	71.0	49.2	68.3	40.5	56.3
140	51.1	71.0	49.3	68.4	41.3	57.3
150	51.3	71.2	49.6	68.9	42.1	58.5
160	51.7	71.8	50.1	69.6	43.1	59.9
170	52.3	72.7	50.8	70.6	44.2	61.4
180	53.0	73.7	51.6	71.7	45.4	63.1
190	53.9	74.9	52.6	73.0	46.7	64.8
200	54.9	76.2	53.6	74.4	48.0	66.6
210	55.9	77.6	54.7	75.9	49.3	68.5
220	57.0	79.2	55.9	77.6	50.8	70.5
230	58.2	80.8	57.1	79.3	52.2	72.5
240	59.4	82.6	58.4	81.1	53.7	74.6
250	60.7	84.3	59.7	82.9	55.2	76.7