PROCEDURE FOR CASTING DIFFERENT LENGTH PRECAST/PRESTRESS CONCRETE BRIDGE UNITS (Combined Beam Pours)

SCOPE:

To establish procedures for the fabrication of beams with different lengths on one casting bed setup. Any deviation from the beam design standard or the Combination Pour Charts is not allowed.

This procedure allows the casting of two different length beams together in the same line in accordance with Combination Pour Charts. For example, a BTC100 beam may be cast with a BTC120 beam with the following modifications made to the BTC100 beam:

- The number of straight strands and deflected strands used for the BTC100 beam shall equal the amount required for the BTC120 beam (44 straight strands and 10 deflected strands).
- The deflected strands for the BTC100 beam are raised by 20 inches.
- Compressive strength at release and at 28 days are increased to 8000 psi and 10000 psi, respectively, for the BTC100 beam.
- Beam end debonding configuration for the BTC120 shall be used at the BTC100 beam ends.

Use of a next longer beam strand pattern may result in camber increase in the modified beams. For example, the calculated camber at the time of release for a BTC100 beam (with a BTC120 strand pattern) will increase by approximately 0.21 inches. Whenever such beam modifications are used, the fabricator shall notify the District Materials Engineer prior to fabrication. No additional acknowledgements will be required as the fabricator will comply with the combination pour charts.

		A 30	A 34	A 38	A 42	A 46	A 50	A 55
A 30	Straight Strands	8	9	10	7	8	9	10
	Deflected Strands	0	0	0	2	2	3	3
	Distance Deflected Strands Raised (in.)	-	-	-	6	4	8	10
	Release Strength (psi)	4500	4500	4500	4500	6000	6000	6000
	28 Day Strength (psi)	5000	5000	5000	5000	7000	7000	7000
	Design Camber @ Release (Plan-in.)	0.13	0.13	0.13	0.13	0.13	0.13	0.13
	Design Camber @ Release (Modified-in.)	0.13	0.17	0.21	0.29	0.30	0.33	0.36
	Absolute Difference in Camber @ Release (in.)	0.00	0.04	0.08	0.16	0.17	0.20	0.23
A 34	Straight Strands		9	10	7	8	9	10
	Deflected Strands		0	0	2	2	3	3
	Distance Deflected Strands Raised (in.)		-	-	4	4	8	10
	Release Strength (psi)		4500	4500	4500	6000	6000	6000
	28 Day Strength (psi)		5000	5000	5000	7000	7000	7000
	Design Camber @ Release (Plan-in.)		0.21	0.21	0.21	0.21	0.21	0.21
	Design Camber @ Release (Modified-in.)		0.21	0.26	0.37	0.39	0.42	0.48
	Absolute Difference in Camber @ Release (in.)		0.00	0.05	0.16	0.18	0.21	0.27
A 38	Straight Strands			10	7	8	9	10
	Deflected Strands			0	2	2	3	3
	Distance Deflected Strands Raised (in.)			-	2	0	6	8
	Release Strength (psi)			4500	4500	6000	6000	6000
	28 Day Strength (psi)			5000	5000	7000	7000	7000
	Design Camber @ Release (Plan-in.)			0.30	0.30	0.30	0.30	0.30
	Design Camber @ Release (Modified-in.)			0.30	0.46	0.48	0.53	0.58
	Absolute Difference in Camber @ Release (in.)			0.00	0.16	0.18	0.23	0.28
A 42	Straight Strands				7	8	9	10
	Deflected Strands				2	2	3	3
	Distance Deflected Strands Raised (in.)				0	0	4	6
	Release Strength (psi)				4500	6000	6000	6000
	28 Day Strength (psi)				5000	7000	7000	7000
	Design Camber @ Release (Plan-in.)				0.59	0.59	0.59	0.59
	Design Camber @ Release (Modified-in.)				0.59	0.57	0.66	0.72
	Absolute Difference in Camber @ Release (in.)				0.00	0.02	0.07	0.13
A 46	Straight Strands					8	9	10
	Deflected Strands					2	3	3
	Distance Deflected Strands Raised (in.)					0	2	4
	Release Strength (psi)					6000	6000	6000
	28 Day Strength (psi)					7000	7000	7000
	Design Camber @ Release (Plan-in.)					0.60	0.60	0.60
	Design Camber @ Release (Modified-in.)					0.60	0.80	0.87
	Absolute Difference in Camber @ Release (in.)					0.00	0.20	0.27

		A 30	A 34	A 38	A 42	A 46	A 50	A 55
A 50	Straight Strands						9	10
	Deflected Strands						3	3
	Distance Deflected Strands Raised (in.)						0	2
	Release Strength (psi)						6000	6000
	28 Day Strength (psi)						7000	7000
	Design Camber @ Release (Plan-in.)						0.88	0.88
	Design Camber @ Release (Modified-in.)						0.88	1.03
	Absolute Difference in Camber @ Release (in.)						0.00	0.15
A 55	Straight Strands							10
	Deflected Strands							3
	Distance Deflected Strands Raised (in.)							0
	Release Strength (psi)							6000
	28 Day Strength (psi)							7000
	Design Camber @ Release (Plan-in.)							1.17
	Design Camber @ Release (Modified-in.)							1.17
	Absolute Difference in Camber @ Release (in.)							0.00

		B 34	B 38	B 42	B 46	B 50	B 55	B 59	B 63	B 67
B 34	Straight Strands	8	8	10	7	8	8			
	Deflected Strands	0	0	0	2	2	3			
	Distance Deflected Strands Raised (in.)	-	-	-	4	8	6			
	Release Strength (psi)	4500	4500	4500	4500	4500	6000			
	28 Day Strength (psi)	5000	5000	5000	5000	5000	7000			
	Design Camber @ Release (Plan-in.)	0.10	0.10	0.10	0.10	0.10	0.10			
	Design Camber @ Release (Modified-in.)	0.10	0.10	0.17	0.24	0.26	0.28			
	Absolute Difference in Camber @ Release (in.)	0.00	0.00	0.07	0.14	0.16	0.18			
B 38	Straight Strands		8	10	7	8	8			
	Deflected Strands		0	0	2	2	3			
	Distance Deflected Strands Raised (in.)		-	-	4	6	6			
	Release Strength (psi)		4500	4500	4500	4500	6000			
	28 Day Strength (psi)		5000	5000	5000	5000	7000			
	Design Camber @ Release (Plan-in.)		0.11	0.11	0.11	0.11	0.11			
	Design Camber @ Release (Modified-in.)		0.11	0.20	0.29	0.32	0.34			
	Absolute Difference in Camber @ Release (in.)		0.00	0.09	0.18	0.21	0.23			
B 42	Straight Strands			10	7	8	8	10		
	Deflected Strands			0	2	2	3	3		
	Distance Deflected Strands Raised (in.)			-	2	4	4	10		
	Release Strength (psi)			4500	4500	4500	6000	6000		
	28 Day Strength (psi)			5000	5000	5000	7000	7000		
	Design Camber @ Release (Plan-in.)			0.23	0.23	0.23	0.23	0.23		
	Design Camber @ Release (Modified-in.)			0.23	0.34	0.38	0.42	0.47		
	Absolute Difference in Camber @ Release (in.)			0.00	0.11	0.15	0.19	0.24		
B 46	Straight Strands				7	8	8	10		
	Deflected Strands				2	2	3	3		
	Distance Deflected Strands Raised (in.)				0	0	2	6		
	Release Strength (psi)				4500	4500	6000	6000		
	28 Day Strength (psi)				5000	5000	7000	7000		
	Design Camber @ Release (Plan-in.)				0.42	0.42	0.42	0.42		
	Design Camber @ Release (Modified-in.)				0.42	0.46	0.51	0.47		
	Absolute Difference in Camber @ Release (in.)				0.00	0.04	0.09	0.05		
B 50	Straight Strands					8	8	10	12	
	Deflected Strands					2	3	3	3	
	Distance Deflected Strands Raised (in.)					0	0	4	8	
	Release Strength (psi)					4500	6000	6000	6000	
	28 Day Strength (psi)					5000	7000	7000	7000	
	Design Camber @ Release (Plan-in.)					0.55	0.55	0.55	0.55	
	Design Camber @ Release (Modified-in.)					0.55	0.60	0.69	0.79	
	Absolute Difference in Camber @ Release (in.)					0.00	0.05	0.14	0.24	

		B 34	B 38	B 42	B 46	B 50	B 55	B 59	B 63	B 67
B 55	Straight Strands						8	10	12	
	Deflected Strands						3	3	3	
	Distance Deflected Strands Raised (in.)						0	2	8	
	Release Strength (psi)						6000	6000	6000	
	28 Day Strength (psi)						7000	7000	7000	
	Design Camber @ Release (Plan-in.)						0.62	0.62	0.62	
	Design Camber @ Release (Modified-in.)						0.62	0.80	0.88	
	Absolute Difference in Camber @ Release (in.)						0.00	0.18	0.26	
B 59	Straight Strands							10	12	14
	Deflected Strands							3	3	3
	Distance Deflected Strands Raised (in.)							0	4	10
	Release Strength (psi)							6000	6000	6000
	28 Day Strength (psi)							7000	7000	7000
	Design Camber @ Release (Plan-in.)							0.85	0.85	0.85
	Design Camber @ Release (Modified-in.)							0.85	1.04	1.13
	Absolute Difference in Camber @ Release (in.)							0.00	0.19	0.28
B 63	Straight Strands								12	14
	Deflected Strands								3	3
	Distance Deflected Strands Raised (in.)								0	2
	Release Strength (psi)								6000	6000
	28 Day Strength (psi)								7000	7000
	Design Camber @ Release (Plan-in.)								1.12	1.12
	Design Camber @ Release (Modified-in.)								1.12	1.39
	Absolute Difference in Camber @ Release (in.)								0.00	0.27
B 67	Straight Strands									14
	Deflected Strands									3
	Distance Deflected Strands Raised (in.)									0
	Release Strength (psi)									6000
	28 Day Strength (psi)									7000
	Design Camber @ Release (Plan-in.)									1.43
	Design Camber @ Release (Modified-in.)									1.43
	Absolute Difference in Camber @ Release (in.)									0.00

		C 30	C 34	C 38	C 42	C 46	C 50	C 55	C 59	C 63	C 67	C 71	C 75	C 80
C 30	Straight Strands	8	10	10	10	10	12							
	Deflected Strands	0	0	0	0	0	0							
	Distance Deflected Strands Raised (in.)	-	-	-	-	-	-							
	Release Strength (psi)	4500	4500	4500	4500	4500	4500							
	28 Day Strength (psi)	5000	5000	5000	5000	5000	5000							
	Design Camber @ Release (Plan-in.)	0.05	0.05	0.05	0.05	0.05	0.05							
	Design Camber @ Release (Modified-in.)	0.05	0.08	0.08	0.08	0.08	0.12							
	Absolute Difference in Camber @ Release (in.)	0.00	0.03	0.03	0.03	0.03	0.07							
C 34	Straight Strands		10	10	10	10	12							
	Deflected Strands		0	0	0	0	0							
	Distance Deflected Strands Raised (in.)		-	-	-	-	-							
	Release Strength (psi)		4500	4500	4500	4500	4500							
	28 Day Strength (psi)		5000	5000	5000	5000	5000							
	Design Camber @ Release (Plan-in.)		0.10	0.10	0.10	0.10	0.10							
	Design Camber @ Release (Modified-in.)		0.10	0.10	0.10	0.10	0.15							
	Absolute Difference in Camber @ Release (in.)		0.00	0.00	0.00	0.00	0.05							
C 38	Straight Strands			10	10	10	12							
	Deflected Strands			0	0	0	0							
	Distance Deflected Strands Raised (in.)			-	-	-	-							
	Release Strength (psi)			4500	4500	4500	4500							
	28 Day Strength (psi)			5000	5000	5000	5000							
	Design Camber @ Release (Plan-in.)			0.11	0.11	0.11	0.11							
	Design Camber @ Release (Modified-in.)			0.11	0.12	0.12	0.18							
	Absolute Difference in Camber @ Release (in.)			0.00	0.01	0.01	0.07							
C 42	Straight Strands				10	10	12	14	14					
	Deflected Strands				0	0	0	0	0					
	Distance Deflected Strands Raised (in.)				-	-	-	-	-					
	Release Strength (psi)				4500	4500	4500	4500	4500					
	28 Day Strength (psi)				5000	5000	5000	5000	5000					
	Design Camber @ Release (Plan-in.)				0.13	0.13	0.13	0.13	0.13					
	Design Camber @ Release (Modified-in.)				0.13	0.13	0.21	0.27	0.27					
	Absolute Difference in Camber @ Release (in.)				0.00	0.00	0.08	0.14	0.14					
C 46	Straight Strands					10	12	14	14					
	Deflected Strands					0	0	0	0					
	Distance Deflected Strands Raised (in.)					-	-	-	-					
	Release Strength (psi)					4500	4500	4500	4500					
	28 Day Strength (psi)					5000	5000	5000	5000					
	Design Camber @ Release (Plan-in.)					0.14	0.14	0.14	0.14					
	Design Camber @ Release (Modified-in.)					0.14	0.23	0.31	0.31					
	Absolute Difference in Camber @ Release (in.)					0.00	0.09	0.17	0.17					

		C 30	C 34	C 38	C 42	C 46	C 50	C 55	C 59	C 63	C 67	C 71	C 75	C 80
C 50	Straight Strands						12	14	14	16				
	Deflected Strands						0	0	0	0				
	Distance Deflected Strands Raised (in.)						-	-	-	-				
	Release Strength (psi)						4500	4500	4500	4500				
	28 Day Strength (psi)						5000	5000	5000	5000				
	Design Camber @ Release (Plan-in.)						0.26	0.26	0.26	0.26				
	Design Camber @ Release (Modified-in.)						0.26	0.34	0.34	0.44				
	Absolute Difference in Camber @ Release (in.)						0.00	0.08	0.08	0.18				
C 55	Straight Strands							14	14	16	18	14		
	Deflected Strands							0	0	0	0	4		
	Distance Deflected Strands Raised (in.)							-	-	-	-	16		
	Release Strength (psi)							4500	4500	4500	4500	5000		
	28 Day Strength (psi)							5000	5000	5000	5000	6000		
	Design Camber @ Release (Plan-in.)							0.37	0.37	0.37	0.37	0.37		
	Design Camber @ Release (Modified-in.)							0.37	0.37	0.49	0.59	0.54		
	Absolute Difference in Camber @ Release (in.)							0.00	0.00	0.12	0.22	0.17		
C 59	Straight Strands								14	16	18	14		
	Deflected Strands								0	0	0	4		
	Distance Deflected Strands Raised (in.)								-	-	-	14		
	Release Strength (psi)								4500	4500	4500	5000		
	28 Day Strength (psi)								5000	5000	5000	6000		
	Design Camber @ Release (Plan-in.)								0.39	0.39	0.39	0.39		
	Design Camber @ Release (Modified-in.)								0.39	0.52	0.64	0.61		
	Absolute Difference in Camber @ Release (in.)								0.00	0.13	0.25	0.22		
C 63	Straight Strands									16	18	14	14	16
	Deflected Strands									0	0	4	6	6
	Distance Deflected Strands Raised (in.)									-	-	8	10	14
	Release Strength (psi)									4500	4500	5000	5000	5000
	28 Day Strength (psi)									5000	5000	6000	6000	6000
	Design Camber @ Release (Plan-in.)									0.56	0.56	0.56	0.56	0.56
	Design Camber @ Release (Modified-in.)									0.56	0.69	0.74	0.74	0.76
	Absolute Difference in Camber @ Release (in.)									0.00	0.13	0.18	0.18	0.20
C 67	Straight Strands										18	14	14	16
	Deflected Strands										0	4	6	6
	Distance Deflected Strands Raised (in.)										-	4	6	10
	Release Strength (psi)										4500	5000	5000	5000
	28 Day Strength (psi)										5000	6000	6000	6000
	Design Camber @ Release (Plan-in.)										0.73	0.73	0.73	0.73
	Design Camber @ Release (Modified-in.)										0.73	0.85	0.88	0.90
	Absolute Difference in Camber @ Release (in.)										0.00	0.12	0.15	0.17

		C 30	C 34	C 38	C 42	C 46	C 50	C 55	C 59	C 63	C 67	C 71	C 75	C 80
C 71	Straight Strands											14	14	16
	Deflected Strands											4	6	6
	Distance Deflected Strands Raised (in.)											0	0	4
	Release Strength (psi)											5000	5000	5000
	28 Day Strength (psi)											6000	6000	6000
	Design Camber @ Release (Plan-in.)											1.01	1.01	1.01
	Design Camber @ Release (Modified-in.)											1.01	1.08	1.10
	Absolute Difference in Camber @ Release (in.)											0.00	0.07	0.09
C 75	Straight Strands												14	16
	Deflected Strands												6	6
	Distance Deflected Strands Raised (in.)												0	2
	Release Strength (psi)												5000	5000
	28 Day Strength (psi)												6000	6000
	Design Camber @ Release (Plan-in.)												1.20	1.20
	Design Camber @ Release (Modified-in.)												1.20	1.22
	Absolute Difference in Camber @ Release (in.)												0.00	0.02
C 80	Straight Strands													16
	Deflected Strands													6
	Distance Deflected Strands Raised (in.)													0
	Release Strength (psi)													5000
	28 Day Strength (psi)													6000
	Design Camber @ Release (Plan-in.)													1.40
	Design Camber @ Release (Modified-in.)													1.40
	Absolute Difference in Camber @ Release (in.)													0.00

		D 35	D 40	D 45	D 50	D 55	D 60	D 65	D 70	D 75	D 80	D 85	D 90	D 95	D 100	D 105	D 110
D 35	Straight Strands	10	10	12	12	12	14										
	Deflected Strands	0	0	0	0	0	0										
	Distance Deflected Strands Raised (in.)	-	-	-	-	-	-										
	Release Strength (psi)	4500	4500	4500	4500	4500	4500										
	28 Day Strength (psi)	5000	5000	5000	5000	5000	5000										
	Design Camber @ Release (Plan-in.)	0.07	0.07	0.07	0.07	0.07	0.07										
	Design Camber @ Release (Modified-in.)	0.07	0.07	0.10	0.11	0.11	0.14										
	Absolute Difference in Camber @ Release (in.)	0.00	0.00	0.03	0.04	0.04	0.07										
D 40	Straight Strands		10	12	12	12	14										
	Deflected Strands		0	0	0	0	0										
	Distance Deflected Strands Raised (in.)		-	-	-	-	-										
	Release Strength (psi)		4500	4500	4500	4500	4500										
	28 Day Strength (psi)		5000	5000	5000	5000	5000										
	Design Camber @ Release (Plan-in.)		0.08	0.08	0.08	0.08	0.08										
	Design Camber @ Release (Modified-in.)		0.08	0.12	0.13	0.14	0.18										
	Absolute Difference in Camber @ Release (in.)		0.00	0.04	0.05	0.06	0.10										
D 45	Straight Strands			12	12	12	14										
	Deflected Strands			0	0	0	0										
	Distance Deflected Strands Raised (in.)			-	-	-	-										
	Release Strength (psi)			4500	4500	4500	4500										
	28 Day Strength (psi)			5000	5000	5000	5000										
	Design Camber @ Release (Plan-in.)			0.14	0.14	0.14	0.14										
	Design Camber @ Release (Modified-in.)			0.14	0.15	0.16	0.21										
	Absolute Difference in Camber @ Release (in.)			0.00	0.01	0.02	0.07										
D 50	Straight Strands				12	12	14	8	8								
	Deflected Strands				0	0	0	4	6								
	Distance Deflected Strands Raised (in.)				-	-	-	2	4								
	Release Strength (psi)				4500	4500	4500	4500	4500								
	28 Day Strength (psi)				5000	5000	5000	5000	5000								
	Design Camber @ Release (Plan-in.)				0.17	0.17	0.17	0.17	0.17								
	Design Camber @ Release (Modified-in.)				0.17	0.18	0.24	0.27	0.28								
	Absolute Difference in Camber @ Release (in.)				0.00	0.01	0.07	0.10	0.11								
D 55	Straight Strands					12	14	8	8								
	Deflected Strands					0	0	4	6								
	Distance Deflected Strands Raised (in.)					-	-	0	0								
	Release Strength (psi)					4500	4500	4500	4500								
	28 Day Strength (psi)					5000	5000	5000	5000								
	Design Camber @ Release (Plan-in.)					0.19	0.19	0.19	0.19								
	Design Camber @ Release (Modified-in.)					0.19	0.26	0.32	0.35								
	Absolute Difference in Camber @ Release (in.)					0.00	0.07	0.13	0.16								

		D 35	D 40	D 45	D 50	D 55	D 60	D 65	D 70	D 75	D 80	D 85	D 90	D 95	D 100	D 105	D 110
D 60	Straight Strands						14	8	8	12							
	Deflected Strands						0	4	6	6							
	Distance Deflected Strands Raised (in.)						-	0	0	6							
	Release Strength (psi)						4500	4500	4500	4500							
	28 Day Strength (psi)						5000	5000	5000	5000							
	Design Camber @ Release (Plan-in.)						0.28	0.28	0.28	0.28							
	Design Camber @ Release (Modified-in.)						0.28	0.35	0.38	0.50							
	Absolute Difference in Camber @ Release (in.)						0.00	0.07	0.10	0.22							
D 65	Straight Strands							8	8	12	12						
	Deflected Strands							4	6	6	6						
	Distance Deflected Strands Raised (in.)							0	0	4	6						
	Release Strength (psi)							4500	4500	4500	4500						
	28 Day Strength (psi)							5000	5000	5000	5000						
	Design Camber @ Release (Plan-in.)							0.40	0.40	0.40	0.40						
	Design Camber @ Release (Modified-in.)							0.40	0.41	0.58	0.57						
	Absolute Difference in Camber @ Release (in.)							0.00	0.01	0.18	0.17						
D 70	Straight Strands								8	12	12	14					
	Deflected Strands								6	6	6	6					
	Distance Deflected Strands Raised (in.)								0	2	4	14					
	Release Strength (psi)								4500	4500	4500	4500					
	28 Day Strength (psi)								5000	5000	5000	5000					
	Design Camber @ Release (Plan-in.)								0.47	0.47	0.47	0.47					
	Design Camber @ Release (Modified-in.)								0.47	0.77	0.64	0.68					
	Absolute Difference in Camber @ Release (in.)								0.00	0.30	0.17	0.21					
D 75	Straight Strands									12	12	14	16				
	Deflected Strands									6	6	6	6				
	Distance Deflected Strands Raised (in.)									0	0	4	10				
	Release Strength (psi)									4500	4500	4500	4500				
	28 Day Strength (psi)									5000	5000	5000	5000				
	Design Camber @ Release (Plan-in.)									0.77	0.77	0.77	0.77				
	Design Camber @ Release (Modified-in.)									0.77	0.75	0.86	0.90				
	Absolute Difference in Camber @ Release (in.)									0.00	0.02	0.09	0.13				
D 80	Straight Strands										12	14	16	18			
	Deflected Strands										6	6	6	6			
	Distance Deflected Strands Raised (in.)										0	2	8	18			
	Release Strength (psi)										4500	4500	4500	4500			
	28 Day Strength (psi)										5000	5000	5000	5000			
	Design Camber @ Release (Plan-in.)										0.83	0.83	0.83	0.83			
	Design Camber @ Release (Modified-in.)										0.83	0.95	0.99	0.97			
	Absolute Difference in Camber @ Release (in.)										0.00	0.12	0.16	0.14			

		D 35	D 40	D 45	D 50	D 55	D 60	D 65	D 70	D 75	D 80	D 85	D 90	D 95	D 100	D 105	D 110
D 85	Straight Strands											14	16	18	22		
	Deflected Strands											6	6	6	6		
	Distance Deflected Strands Raised (in.)											0	0	8	22		
	Release Strength (psi)											4500	4500	4500	6000		
	28 Day Strength (psi)											5000	5000	5000	7500		
	Design Camber @ Release (Plan-in.)											1.10	1.10	1.10	1.10		
	Design Camber @ Release (Modified-in.)											1.10	1.20	1.24	1.36		
	Absolute Difference in Camber @ Release (in.)											0.00	0.10	0.14	0.26		
D 90	Straight Strands												16	18	22	26	
	Deflected Strands												6	6	6	6	
	Distance Deflected Strands Raised (in.)												0	4	14	22	
	Release Strength (psi)												4500	4500	6000	6000	
	28 Day Strength (psi)												5000	5000	7500	7500	
	Design Camber @ Release (Plan-in.)												1.32	1.32	1.32	1.32	
	Design Camber @ Release (Modified-in.)												1.32	1.38	1.62	1.60	
	Absolute Difference in Camber @ Release (in.)												0.00	0.06	0.30	0.28	
D 95	Straight Strands													18	22	26	
	Deflected Strands													6	6	6	
	Distance Deflected Strands Raised (in.)													0	8	12	
	Release Strength (psi)													4500	6000	6000	
	28 Day Strength (psi)													5000	7500	7500	
	Design Camber @ Release (Plan-in.)													1.61	1.61	1.61	
	Design Camber @ Release (Modified-in.)													1.61	1.85	1.91	
	Absolute Difference in Camber @ Release (in.)													0.00	0.24	0.30	
D 100	Straight Strands														22	26	28
	Deflected Strands														6	6	6
	Distance Deflected Strands Raised (in.)														0	4	8
	Release Strength (psi)														6000	6000	6000
	28 Day Strength (psi)														7500	7500	7500
	Design Camber @ Release (Plan-in.)														1.96	1.96	1.96
	Design Camber @ Release (Modified-in.)														1.96	2.21	2.24
	Absolute Difference in Camber @ Release (in.)														0.00	0.25	0.28
D 105	Straight Strands															26	28
	Deflected Strands															6	6
	Distance Deflected Strands Raised (in.)															0	4
	Release Strength (psi)															6000	6500
	28 Day Strength (psi)															7500	7500
	Design Camber @ Release (Plan-in.)															2.23	2.23
	Design Camber @ Release (Modified-in.)															2.23	2.44
	Absolute Difference in Camber @ Release (in.)															0.00	0.21

		D 35	D 40	D 45	D 50	D 55	D 60	D 65	D 70	D 75	D 80	D 85	D 90	D 95	D 100	D 105	D 110
D 110	Straight Strands																28
	Deflected Strands																6
	Distance Deflected Strands Raised (in.)																0
	Release Strength (psi)																6500
	28 Day Strength (psi)																7500
	Design Camber @ Release (Plan-in.)																2.74
	Design Camber @ Release (Modified-in.)																2.74
	Absolute Difference in Camber @ Release (in.)																0.00

		BTB 30	BTB 35	BTB 40	BTB 45	BTB 50	BTB 55	BTB 60	BTB 65	BTB 70	BTB 75	BTB 80	BTB 85	BTB 90	*BTB 95	*BTB 100	*BTB 105
BTB 30	Straight Strands	8	10	12	12												
	Deflected Strands	0	0	0	0												
	Distance Deflected Strands Raised (in.)	-	-	-	-												
	Release Strength (psi)	4500	4500	4500	4500												
	28 Day Strength (psi)	5000	5000	5000	5000												
	Design Camber @ Release (Plan-in.)	0.12	0.12	0.12	0.12												
	Design Camber @ Release (Modified-in.)	0.12	0.16	0.20	0.20												
	Absolute Difference in Camber @ Release (in.)	0.00	0.04	0.08	0.08												
BTB 35	Straight Strands		10	12	12												
	Deflected Strands		0	0	0												
	Distance Deflected Strands Raised (in.)		-	-	-												
	Release Strength (psi)		4500	4500	4500												
	28 Day Strength (psi)		5000	5000	5000												
	Design Camber @ Release (Plan-in.)		0.20	0.20	0.20												
	Design Camber @ Release (Modified-in.)		0.20	0.26	0.26												
	Absolute Difference in Camber @ Release (in.)		0.00	0.06	0.06												
BTB 40	Straight Strands			12	12	14											
	Deflected Strands			0	0	0											
	Distance Deflected Strands Raised (in.)			-	-	-											
	Release Strength (psi)			4500	4500	4500											
	28 Day Strength (psi)			5000	5000	5000											
	Design Camber @ Release (Plan-in.)			0.31	0.31	0.31											
	Design Camber @ Release (Modified-in.)			0.31	0.31	0.37											
	Absolute Difference in Camber @ Release (in.)			0.00	0.00	0.06											
BTB 45	Straight Strands				12	14	16	16									
	Deflected Strands				0	0	0	2									
	Distance Deflected Strands Raised (in.)				-	-	-	8									
	Release Strength (psi)				4500	4500	4500	4500									
	28 Day Strength (psi)				5000	5000	5000	5000									
	Design Camber @ Release (Plan-in.)				0.37	0.37	0.37	0.37									
	Design Camber @ Release (Modified-in.)				0.37	0.44	0.50	0.52									
	Absolute Difference in Camber @ Release (in.)				0.00	0.07	0.13	0.15									
BTB 50	Straight Strands					14	16	16	18								
	Deflected Strands					0	0	2	2								
	Distance Deflected Strands Raised (in.)					-	-	4	20								
	Release Strength (psi)					4500	4500	4500	4500								
	28 Day Strength (psi)					5000	5000	5000	5000								
	Design Camber @ Release (Plan-in.)					0.51	0.51	0.51	0.51								
	Design Camber @ Release (Modified-in.)					0.51	0.58	0.62	0.68								
	Absolute Difference in Camber @ Release (in.)					0.00	0.07	0.11	0.17								

* When combination pours are used for BTB95, BTB100, and BTB105, beam end debonding configuration shall be used at all beam ends.

		BTB 30	BTB 35	BTB 40	BTB 45	BTB 50	BTB 55	BTB 60	BTB 65	BTB 70	BTB 75	BTB 80	BTB 85	BTB 90	*BTB 95	*BTB 100	*BTB 105
BTB 55	Straight Strands						16	16	18	20							
	Deflected Strands						0	2	2	4							
	Distance Deflected Strands Raised (in.)						-	0	14	22							
	Release Strength (psi)						4500	4500	4500	5000							
	28 Day Strength (psi)						5000	5000	5000	5500							
	Design Camber @ Release (Plan-in.)						0.66	0.66	0.66	0.66							
	Design Camber @ Release (Modified-in.)						0.66	0.72	0.80	0.83							
	Absolute Difference in Camber @ Release (in.)						0.00	0.06	0.14	0.17							
BTB 60	Straight Strands							16	18	20	22						
	Deflected Strands							2	2	4	6						
	Distance Deflected Strands Raised (in.)							0	12	12	18						
	Release Strength (psi)							4500	4500	5000	5500						
	28 Day Strength (psi)							5000	5000	5500	6500						
	Design Camber @ Release (Plan-in.)							0.81	0.81	0.81	0.81						
	Design Camber @ Release (Modified-in.)							0.81	0.91	0.96	0.95						
	Absolute Difference in Camber @ Release (in.)							0.00	0.10	0.15	0.14						
BTB 65	Straight Strands								18	20	22	24					
	Deflected Strands								2	4	6	8					
	Distance Deflected Strands Raised (in.)								0	10	14	16					
	Release Strength (psi)								4500	5000	5500	6000					
	28 Day Strength (psi)								5000	5500	6500	7000					
	Design Camber @ Release (Plan-in.)								1.05	1.05	1.05	1.05					
	Design Camber @ Release (Modified-in.)								1.05	1.15	1.18	1.29					
	Absolute Difference in Camber @ Release (in.)								0.00	0.10	0.13	0.24					
BTB 70	Straight Strands									20	22	24					
	Deflected Strands									4	6	8					
	Distance Deflected Strands Raised (in.)									0	4	6					
	Release Strength (psi)									5000	5500	6000					
	28 Day Strength (psi)									5500	6500	7000					
	Design Camber @ Release (Plan-in.)									1.35	1.35	1.35					
	Design Camber @ Release (Modified-in.)									1.35	1.39	1.60					
	Absolute Difference in Camber @ Release (in.)									0.00	0.04	0.25					
BTB 75	Straight Strands										22	24	28	30			
	Deflected Strands										6	8	8	8			
	Distance Deflected Strands Raised (in.)										0	2	10	14			
	Release Strength (psi)										5500	6000	6500	7500			
	28 Day Strength (psi)										6500	7000	7500	8500			
	Design Camber @ Release (Plan-in.)										1.67	1.67	1.67	1.67			
	Design Camber @ Release (Modified-in.)										1.67	1.89	1.95	1.89			
	Absolute Difference in Camber @ Release (in.)										0.00	0.22	0.28	0.22			

* When combination pours are used for BTB95, BTB100, and BTB105, beam end debonding configuration shall be used at all beam ends.

		BTB 30	BTB 35	BTB 40	BTB 45	BTB 50	BTB 55	BTB 60	BTB 65	BTB 70	BTB 75	BTB 80	BTB 85	BTB 90	*BTB 95	*BTB 100	*BTB 105
BTB 80	Straight Strands											24	28	30	34		
	Deflected Strands											8	8	8	10		
	Distance Deflected Strands Raised (in.)											0	8	10	14		
	Release Strength (psi)											6000	6500	7500	8000		
	28 Day Strength (psi)											7000	7500	8500	9500		
	Design Camber @ Release (Plan-in.)											1.97	1.97	1.97	1.97		
	Design Camber @ Release (Modified-in.)											1.97	2.18	2.22	2.20		
	Absolute Difference in Camber @ Release (in.)											0.00	0.21	0.25	0.23		
BTB 85	Straight Strands												28	30	34		
	Deflected Strands												8	8	10		
	Distance Deflected Strands Raised (in.)												0	0	6		
	Release Strength (psi)												6500	7500	8000		
	28 Day Strength (psi)												7500	8500	9500		
	Design Camber @ Release (Plan-in.)												2.76	2.76	2.76		
	Design Camber @ Release (Modified-in.)												2.76	2.91	2.89		
	Absolute Difference in Camber @ Release (in.)												0.00	0.15	0.13		
BTB 90	Straight Strands													30	34	38	38
	Deflected Strands													8	10	8	12
	Distance Deflected Strands Raised (in.)													0	4	8	6
	Release Strength (psi)													7500	8000	8000	8500
	28 Day Strength (psi)													8500	9500	10000	10000
	Design Camber @ Release (Plan-in.)													3.07	3.07	3.07	3.07
	Design Camber @ Release (Modified-in.)													3.07	3.20	3.30	3.32
	Absolute Difference in Camber @ Release (in.)													0.00	0.13	0.23	0.25
BTB 95	Straight Strands														34	38	38
	Deflected Strands														10	8	12
	Distance Deflected Strands Raised (in.)														0	4	2
	Release Strength (psi)														8000	8000	8500
	28 Day Strength (psi)														9500	10000	10000
	Design Camber @ Release (Plan-in.)														3.68	3.68	3.68
	Design Camber @ Release (Modified-in.)														3.68	3.72	3.88
	Absolute Difference in Camber @ Release (in.)														0.00	0.04	0.20
BTB 100	Straight Strands															38	38
	Deflected Strands															8	12
	Distance Deflected Strands Raised (in.)															0	0
	Release Strength (psi)															8000	8500
	28 Day Strength (psi)															10000	10000
	Design Camber @ Release (Plan-in.)															4.17	4.17
	Design Camber @ Release (Modified-in.)															4.17	4.26
	Absolute Difference in Camber @ Release (in.)															0.00	0.09

* When combination pours are used for BTB95, BTB100, and BTB105, beam end debonding configuration shall be used at all beam ends.

		BTB 30	BTB 35	BTB 40	BTB 45	BTB 50	BTB 55	BTB 60	BTB 65	BTB 70	BTB 75	BTB 80	BTB 85	BTB 90	*BTB 95	*BTB 100	*BTB 105
BTB 105	Straight Strands																38
	Deflected Strands																12
	Distance Deflected Strands Raised (in.)																0
	Release Strength (psi)																8500
	28 Day Strength (psi)																10000
	Design Camber @ Release (Plan-in.)																4.42
	Design Camber @ Release (Modified-in.)																4.42
	Absolute Difference in Camber @ Release (in.)																0.00

* When combination pours are used for BTB95, BTB100, and BTB105, beam end debonding configuration shall be used at all beam ends.

		BTC 30	BTC 35	BTC 40	BTC 45	BTC 50	BTC 55	BTC 60	BTC 65	BTC 70	BTC 75	BTC 80	BTC 85	BTC 90	BTC 95	BTC 100	BTC 105	BTC 110	*BTC 115	*BTC 120
BTC 30	Straight Strands	8	8	10	10	12	14													
	Deflected Strands	0	0	0	0	0	0													
	Distance Deflected Strands Raised (in.)	-	-	-	-	-	-													
	Release Strength (psi)	4500	4500	4500	4500	4500	4500													
	28 Day Strength (psi)	5000	5000	5000	5000	5000	5000													
	Design Camber @ Release (Plan-in.)	0.09	0.09	0.09	0.09	0.09	0.09													
	Design Camber @ Release (Modified-in.)	0.09	0.09	0.11	0.11	0.14	0.16													
	Absolute Difference in Camber @ Release (in.)	0.00	0.00	0.02	0.02	0.05	0.07													
BTC 35	Straight Strands		8	10	10	12	14													
	Deflected Strands		0	0	0	0	0													
	Distance Deflected Strands Raised (in.)		-	-	-	-	-													
	Release Strength (psi)		4500	4500	4500	4500	4500													
	28 Day Strength (psi)		5000	5000	5000	5000	5000													
	Design Camber @ Release (Plan-in.)		0.11	0.11	0.11	0.11	0.11													
	Design Camber @ Release (Modified-in.)		0.11	0.15	0.15	0.18	0.21													
	Absolute Difference in Camber @ Release (in.)		0.00	0.04	0.04	0.07	0.10													
BTC 40	Straight Strands			10	10	12	14													
	Deflected Strands			0	0	0	0													
	Distance Deflected Strands Raised (in.)			-	-	-	-													
	Release Strength (psi)			4500	4500	4500	4500													
	28 Day Strength (psi)			5000	5000	5000	5000													
	Design Camber @ Release (Plan-in.)			0.18	0.18	0.18	0.18													
	Design Camber @ Release (Modified-in.)			0.18	0.18	0.23	0.27													
	Absolute Difference in Camber @ Release (in.)			0.00	0.00	0.05	0.09													
BTC 45	Straight Strands				10	12	14	14	14											
	Deflected Strands				0	0	0	0	2											
	Distance Deflected Strands Raised (in.)				-	-	-	-	0											
	Release Strength (psi)				4500	4500	4500	4500	5000											
	28 Day Strength (psi)				5000	5000	5000	5000	6000											
	Design Camber @ Release (Plan-in.)				0.21	0.21	0.21	0.21	0.21											
	Design Camber @ Release (Modified-in.)				0.21	0.27	0.32	0.32	0.33											
	Absolute Difference in Camber @ Release (in.)				0.00	0.06	0.11	0.11	0.12											
BTC 50	Straight Strands					12	14	14	14											
	Deflected Strands					0	0	0	2											
	Distance Deflected Strands Raised (in.)					-	-	-	0											
	Release Strength (psi)					4500	4500	4500	5000											
	28 Day Strength (psi)					5000	5000	5000	6000											
	Design Camber @ Release (Plan-in.)					0.31	0.31	0.31	0.31											
	Design Camber @ Release (Modified-in.)					0.31	0.37	0.37	0.39											
	Absolute Difference in Camber @ Release (in.)					0.00	0.06	0.06	0.08											

* When combination pours are used for the BTC115 and BTC120, the beam end debonding configuration shall be used at all beam ends.

		BTC 30	BTC 35	BTC 40	BTC 45	BTC 50	BTC 55	BTC 60	BTC 65	BTC 70	BTC 75	BTC 80	BTC 85	BTC 90	BTC 95	BTC 100	BTC 105	BTC 110	*BTC 115	*BTC 120
BTC 55	Straight Strands						14	14	14	16										
	Deflected Strands						0	0	2	2										
	Distance Deflected Strands Raised (in.)						-	-	0	0										
	Release Strength (psi)						4500	4500	5000	5000										
	28 Day Strength (psi)						5000	5000	6000	6000										
	Design Camber @ Release (Plan-in.)						0.42	0.42	0.42	0.42										
	Design Camber @ Release (Modified-in.)						0.42	0.42	0.44	0.51										
	Absolute Difference in Camber @ Release (in.)						0.00	0.00	0.02	0.09										
BTC 60	Straight Strands							14	14	16	16									
	Deflected Strands							0	2	2	4									
	Distance Deflected Strands Raised (in.)							-	0	0	0									
	Release Strength (psi)							4500	5000	5000	5000									
	28 Day Strength (psi)							5000	6000	6000	6000									
	Design Camber @ Release (Plan-in.)							0.46	0.46	0.46	0.46									
	Design Camber @ Release (Modified-in.)							0.46	0.49	0.56	0.64									
	Absolute Difference in Camber @ Release (in.)							0.00	0.03	0.10	0.18									
BTC 65	Straight Strands								14	16	16	20								
	Deflected Strands								2	2	4	4								
	Distance Deflected Strands Raised (in.)								0	0	0	16								
	Release Strength (psi)								5000	5000	5000	6000								
	28 Day Strength (psi)								6000	6000	6000	7000								
	Design Camber @ Release (Plan-in.)								0.54	0.54	0.54	0.54								
	Design Camber @ Release (Modified-in.)								0.54	0.62	0.70	0.80								
	Absolute Difference in Camber @ Release (in.)								0.00	0.08	0.16	0.26								
BTC 70	Straight Strands									16	16	20	22							
	Deflected Strands									2	4	4	4							
	Distance Deflected Strands Raised (in.)									0	0	10	18							
	Release Strength (psi)									5000	5000	6000	6000							
	28 Day Strength (psi)									6000	6000	7000	7000							
	Design Camber @ Release (Plan-in.)									0.67	0.67	0.67	0.67							
	Design Camber @ Release (Modified-in.)									0.67	0.76	0.93	0.97							
	Absolute Difference in Camber @ Release (in.)									0.00	0.09	0.26	0.30							
BTC 75	Straight Strands										16	20	22	24						
	Deflected Strands										4	4	4	6						
	Distance Deflected Strands Raised (in.)										0	0	16	20						
	Release Strength (psi)										5000	6000	6000	6000						
	28 Day Strength (psi)										6000	7000	7000	7000						
	Design Camber @ Release (Plan-in.)										0.83	0.83	0.83	0.83						
	Design Camber @ Release (Modified-in.)										0.83	1.13	1.06	1.09						
	Absolute Difference in Camber @ Release (in.)										0.00	0.30	0.23	0.26						

* When combination pours are used for the BTC115 and BTC120, the beam end debonding configuration shall be used at all beam ends.

		BTC 30	BTC 35	BTC 40	BTC 45	BTC 50	BTC 55	BTC 60	BTC 65	BTC 70	BTC 75	BTC 80	BTC 85	BTC 90	BTC 95	BTC 100	BTC 105	BTC 110	*BTC 115	*BTC 120
BTC 80	Straight Strands											20	22	24	28					
	Deflected Strands											4	4	6	6					
	Distance Deflected Strands Raised (in.)											0	0	10	24					
	Release Strength (psi)											6000	6000	6000	6500					
	28 Day Strength (psi)											7000	7000	7000	7500					
	Design Camber @ Release (Plan-in.)											1.11	1.11	1.11	1.11					
	Design Camber @ Release (Modified-in.)											1.11	1.36	1.38	1.37					
	Absolute Difference in Camber @ Release (in.)											0.00	0.25	0.27	0.26					
BTC 85	Straight Strands												22	24	28	30				
	Deflected Strands												4	6	6	6				
	Distance Deflected Strands Raised (in.)												0	8	20	24				
	Release Strength (psi)												6000	6000	6500	7000				
	28 Day Strength (psi)												7000	7000	7500	8000				
	Design Camber @ Release (Plan-in.)												1.31	1.31	1.31	1.31				
	Design Camber @ Release (Modified-in.)												1.31	1.50	1.55	1.58				
	Absolute Difference in Camber @ Release (in.)												0.00	0.19	0.24	0.27				
BTC 90	Straight Strands													24	28	30	34			
	Deflected Strands													6	6	6	8			
	Distance Deflected Strands Raised (in.)													0	10	14	20			
	Release Strength (psi)													6000	6500	7000	7500			
	28 Day Strength (psi)													7000	7500	8000	8500			
	Design Camber @ Release (Plan-in.)													1.65	1.65	1.65	1.65			
	Design Camber @ Release (Modified-in.)													1.65	1.90	1.94	1.95			
	Absolute Difference in Camber @ Release (in.)													0.00	0.25	0.29	0.30			
BTC 95	Straight Strands														28	30	34	38		
	Deflected Strands														6	6	8	8		
	Distance Deflected Strands Raised (in.)														0	0	10	16		
	Release Strength (psi)														6500	7000	7500	7500		
	28 Day Strength (psi)														7500	8000	8500	9000		
	Design Camber @ Release (Plan-in.)														2.29	2.29	2.29	2.29		
	Design Camber @ Release (Modified-in.)														2.29	2.45	2.44	2.53		
	Absolute Difference in Camber @ Release (in.)														0.00	0.16	0.15	0.24		
BTC 100	Straight Strands															30	34	38	40	44
	Deflected Strands															6	8	8	10	10
	Distance Deflected Strands Raised (in.)															0	4	12	14	20
	Release Strength (psi)															7000	7500	7500	7500	8000
	28 Day Strength (psi)															8000	8500	9000	9500	10000
	Design Camber @ Release (Plan-in.)															2.56	2.56	2.56	2.56	2.56
	Design Camber @ Release (Modified-in.)															2.56	2.81	2.81	2.81	2.77
	Absolute Difference in Camber @ Release (in.)															0.00	0.25	0.25	0.25	0.21

* When combination pours are used for the BTC115 and BTC120, the beam end debonding configuration shall be used at all beam ends.

		BTC 30	BTC 35	BTC 40	BTC 45	BTC 50	BTC 55	BTC 60	BTC 65	BTC 70	BTC 75	BTC 80	BTC 85	BTC 90	BTC 95	BTC 100	BTC 105	BTC 110	*BTC 115	*BTC 120
BTC 105	Straight Strands																34	38	40	44
	Deflected Strands																8	8	10	10
	Distance Deflected Strands Raised (in.)																0	4	8	12
	Release Strength (psi)																7500	7500	7500	8000
	28 Day Strength (psi)																8500	9000	9500	10000
	Design Camber @ Release (Plan-in.)																3.10	3.10	3.10	3.10
	Design Camber @ Release (Modified-in.)																3.10	3.30	3.27	3.34
	Absolute Difference in Camber @ Release (in.)																0.00	0.20	0.17	0.24
BTC 110	Straight Strands																	38	40	44
	Deflected Strands																	8	10	10
	Distance Deflected Strands Raised (in.)																	0	2	6
	Release Strength (psi)																	7500	7500	8000
	28 Day Strength (psi)																	9000	9500	10000
	Design Camber @ Release (Plan-in.)																	3.62	3.62	3.62
	Design Camber @ Release (Modified-in.)																	3.62	3.77	3.84
	Absolute Difference in Camber @ Release (in.)																	0.00	0.15	0.22
BTC 115	Straight Strands																		40	44
	Deflected Strands																		10	10
	Distance Deflected Strands Raised (in.)																		0	2
	Release Strength (psi)																		7500	8000
	28 Day Strength (psi)																		9500	10000
	Design Camber @ Release (Plan-in.)																		4.04	4.04
	Design Camber @ Release (Modified-in.)																		4.04	4.22
	Absolute Difference in Camber @ Release (in.)																		0.00	0.18
BTC 120	Straight Strands																			44
	Deflected Strands																			10
	Distance Deflected Strands Raised (in.)																			0
	Release Strength (psi)																			8000
	28 Day Strength (psi)																			10000
	Design Camber @ Release (Plan-in.)																			4.48
	Design Camber @ Release (Modified-in.)																			4.48
	Absolute Difference in Camber @ Release (in.)																			0.00

* When combination pours are used for the BTC115 and BTC120, the beam end debonding configuration shall be used at all beam ends.

		BTD 50	BTD 55	BTD 60	BTD 65	BTD 70	BTD 75	BTD 80	BTD 85	BTD 90	BTD 95	BTD 100	BTD 105	BTD 110	BTD 115	BTD 120	BTD 125	*BTD 130	*BTD 135
BTD 50	Straight Strands	12	14	12	14														
	Deflected Strands	0	0	2	2														
	Distance Deflected Strands Raised (in.)	-	-	0	0														
	Release Strength (psi)	4500	4500	4500	4500														
	28 Day Strength (psi)	5000	5000	5000	5000														
	Design Camber @ Release (Plan-in.)	0.24	0.24	0.24	0.24														
	Design Camber @ Release (Modified-in.)	0.24	0.30	0.28	0.32														
	Absolute Difference in Camber @ Release (in.)	0.00	0.06	0.04	0.08														
BTD 55	Straight Strands		14	12	14	14													
	Deflected Strands		0	2	2	2													
	Distance Deflected Strands Raised (in.)		-	0	0	0													
	Release Strength (psi)		4500	4500	4500	4500													
	28 Day Strength (psi)		5000	5000	5000	5000													
	Design Camber @ Release (Plan-in.)		0.34	0.34	0.34	0.34													
	Design Camber @ Release (Modified-in.)		0.34	0.32	0.37	0.37													
	Absolute Difference in Camber @ Release (in.)		0.00	0.02	0.03	0.03													
BTD 60	Straight Strands			12	14	14	16												
	Deflected Strands			2	2	2	2												
	Distance Deflected Strands Raised (in.)			0	0	0	0												
	Release Strength (psi)			4500	4500	4500	5000												
	28 Day Strength (psi)			5000	5000	5000	6000												
	Design Camber @ Release (Plan-in.)			0.36	0.36	0.36	0.36												
	Design Camber @ Release (Modified-in.)			0.36	0.42	0.42	0.47												
	Absolute Difference in Camber @ Release (in.)			0.00	0.06	0.06	0.11												
BTD 65	Straight Strands				14	14	16	18											
	Deflected Strands				2	2	2	2											
	Distance Deflected Strands Raised (in.)				0	0	0	4											
	Release Strength (psi)				4500	4500	5000	5000											
	28 Day Strength (psi)				5000	5000	6000	6000											
	Design Camber @ Release (Plan-in.)				0.47	0.47	0.47	0.47											
	Design Camber @ Release (Modified-in.)				0.47	0.47	0.52	0.60											
	Absolute Difference in Camber @ Release (in.)				0.00	0.00	0.05	0.13											
BTD 70	Straight Strands					14	16	18	18										
	Deflected Strands					2	2	2	4										
	Distance Deflected Strands Raised (in.)					0	0	4	6										
	Release Strength (psi)					4500	5000	5000	5000										
	28 Day Strength (psi)					5000	6000	6000	6000										
	Design Camber @ Release (Plan-in.)					0.49	0.49	0.49	0.49										
	Design Camber @ Release (Modified-in.)					0.49	0.57	0.66	0.68										
	Absolute Difference in Camber @ Release (in.)					0.00	0.08	0.17	0.19										

* When combination pours are used for BTD130 and BTD135, the beam end debonding configuration shall be used at all beam ends.

		BTD 50	BTD 55	BTD 60	BTD 65	BTD 70	BTD 75	BTD 80	BTD 85	BTD 90	BTD 95	BTD 100	BTD 105	BTD 110	BTD 115	BTD 120	BTD 125	*BTD 130	*BTD 135
BTD 75	Straight Strands						16	18	18	20									
	Deflected Strands						2	2	4	4									
	Distance Deflected Strands Raised (in.)						0	0	4	4									
	Release Strength (psi)						5000	5000	5000	5500									
	28 Day Strength (psi)						6000	6000	6000	6500									
	Design Camber @ Release (Plan-in.)						0.62	0.62	0.62	0.62									
	Design Camber @ Release (Modified-in.)						0.62	0.72	0.75	0.82									
	Absolute Difference in Camber @ Release (in.)						0.00	0.10	0.13	0.20									
BTD 80	Straight Strands							18	18	20	24								
	Deflected Strands							2	4	4	4								
	Distance Deflected Strands Raised (in.)							0	0	0	8								
	Release Strength (psi)							5000	5000	5500	5500								
	28 Day Strength (psi)							6000	6000	6500	6500								
	Design Camber @ Release (Plan-in.)							0.78	0.78	0.78	0.78								
	Design Camber @ Release (Modified-in.)							0.78	0.83	0.91	1.07								
	Absolute Difference in Camber @ Release (in.)							0.00	0.05	0.13	0.29								
BTD 85	Straight Strands								18	20	24								
	Deflected Strands								4	4	4								
	Distance Deflected Strands Raised (in.)								0	0	4								
	Release Strength (psi)								5000	5500	5500								
	28 Day Strength (psi)								6000	6500	6500								
	Design Camber @ Release (Plan-in.)								0.90	0.90	0.90								
	Design Camber @ Release (Modified-in.)								0.90	0.96	1.18								
	Absolute Difference in Camber @ Release (in.)								0.00	0.06	0.28								
BTD 90	Straight Strands									20	24	26							
	Deflected Strands									4	4	4							
	Distance Deflected Strands Raised (in.)									0	0	22							
	Release Strength (psi)									5500	5500	6000							
	28 Day Strength (psi)									6500	6500	7000							
	Design Camber @ Release (Plan-in.)									1.03	1.03	1.03							
	Design Camber @ Release (Modified-in.)									1.03	1.28	1.32							
	Absolute Difference in Camber @ Release (in.)									0.00	0.25	0.29							
BTD 95	Straight Strands										24	26	28						
	Deflected Strands										4	4	6						
	Distance Deflected Strands Raised (in.)										0	0	12						
	Release Strength (psi)										5500	6000	6000						
	28 Day Strength (psi)										6500	7000	7000						
	Design Camber @ Release (Plan-in.)										1.38	1.38	1.38						
	Design Camber @ Release (Modified-in.)										1.38	1.65	1.66						
	Absolute Difference in Camber @ Release (in.)										0.00	0.27	0.28						

* When combination pours are used for BTD130 and BTD135, the beam end debonding configuration shall be used at all beam ends.

		BTD 50	BTD 55	BTD 60	BTD 65	BTD 70	BTD 75	BTD 80	BTD 85	BTD 90	BTD 95	BTD 100	BTD 105	BTD 110	BTD 115	BTD 120	BTD 125	*BTD 130	*BTD 135
BTD 100	Straight Strands											26	28	30	34				
	Deflected Strands											4	6	6	6				
	Distance Deflected Strands Raised (in.)											0	6	14	28				
	Release Strength (psi)											6000	6000	6500	7000				
	28 Day Strength (psi)											7000	7000	7500	8000				
	Design Camber @ Release (Plan-in.)											1.57	1.57	1.57	1.57				
	Design Camber @ Release (Modified-in.)											1.57	1.85	1.87	1.85				
	Absolute Difference in Camber @ Release (in.)											0.00	0.28	0.30	0.28				
BTD 105	Straight Strands												28	30	34				
	Deflected Strands												6	6	6				
	Distance Deflected Strands Raised (in.)												0	4	18				
	Release Strength (psi)												6000	6500	7000				
	28 Day Strength (psi)												7000	7500	8000				
	Design Camber @ Release (Plan-in.)												1.89	1.89	1.89				
	Design Camber @ Release (Modified-in.)												1.89	2.17	2.15				
	Absolute Difference in Camber @ Release (in.)												0.00	0.28	0.26				
BTD 110	Straight Strands													30	34	36	38		
	Deflected Strands													6	6	8	10		
	Distance Deflected Strands Raised (in.)													0	2	10	14		
	Release Strength (psi)													6500	7000	7000	7500		
	28 Day Strength (psi)													7500	8000	8000	8500		
	Design Camber @ Release (Plan-in.)													2.34	2.34	2.34	2.34		
	Design Camber @ Release (Modified-in.)													2.34	2.62	2.62	2.57		
	Absolute Difference in Camber @ Release (in.)													0.00	0.28	0.28	0.23		
BTD 115	Straight Strands														34	36	38	42	46
	Deflected Strands														6	8	10	12	12
	Distance Deflected Strands Raised (in.)														0	2	6	14	18
	Release Strength (psi)														7000	7000	7500	7500	8000
	28 Day Strength (psi)														8000	8000	8500	9000	9500
	Design Camber @ Release (Plan-in.)														2.75	2.75	2.75	2.75	2.75
	Design Camber @ Release (Modified-in.)														2.75	2.99	3.00	2.95	3.01
	Absolute Difference in Camber @ Release (in.)														0.00	0.24	0.25	0.20	0.26
BTD 120	Straight Strands															36	38	42	46
	Deflected Strands															8	10	12	12
	Distance Deflected Strands Raised (in.)															0	2	8	14
	Release Strength (psi)															7000	7500	7500	8000
	28 Day Strength (psi)															8000	8500	9000	9500
	Design Camber @ Release (Plan-in.)															3.14	3.14	3.14	3.14
	Design Camber @ Release (Modified-in.)															3.14	3.28	3.38	3.33
	Absolute Difference in Camber @ Release (in.)															0.00	0.14	0.24	0.19

* When combination pours are used for BTD130 and BTD135, the beam end debonding configuration shall be used at all beam ends.

		BTD 50	BTD 55	BTD 60	BTD 65	BTD 70	BTD 75	BTD 80	BTD 85	BTD 90	BTD 95	BTD 100	BTD 105	BTD 110	BTD 115	BTD 120	BTD 125	*BTD 130	*BTD 135
BTD 125	Straight Strands																38	42	46
	Deflected Strands																10	12	12
	Distance Deflected Strands Raised (in.)																0	4	10
	Release Strength (psi)																7500	7500	8000
	28 Day Strength (psi)																8500	9000	9500
	Design Camber @ Release (Plan-in.)																3.46	3.46	3.46
	Design Camber @ Release (Modified-in.)																3.46	3.70	3.65
	Absolute Difference in Camber @ Release (in.)																0.00	0.24	0.19
BTD 130	Straight Strands																	42	46
	Deflected Strands																	12	12
	Distance Deflected Strands Raised (in.)																	0	2
	Release Strength (psi)																	7500	8000
	28 Day Strength (psi)																	9000	9500
	Design Camber @ Release (Plan-in.)																	4.04	4.04
	Design Camber @ Release (Modified-in.)																	4.04	4.24
	Absolute Difference in Camber @ Release (in.)																	0.00	0.20
BTD 135	Straight Strands																		46
	Deflected Strands																		12
	Distance Deflected Strands Raised (in.)																		0
	Release Strength (psi)																		8000
	28 Day Strength (psi)																		9500
	Design Camber @ Release (Plan-in.)																		4.46
	Design Camber @ Release (Modified-in.)																		4.46
	Absolute Difference in Camber @ Release (in.)																		0.00

* When combination pours are used for BTD130 and BTD135, the beam end debonding configuration shall be used at all beam ends.

		BTE 60	BTE 65	BTE 70	BTE 75	BTE 80	BTE 85	BTE 90	BTE 95	BTE 100	BTE 105	BTE 110	BTE 115	BTE 120	BTE 125	BTE 130	BTE 135	BTE 140	BTE 145	*BTE 150	*BTE 155
BTE 60	Straight Strands	14	14	16	16	18	18														
	Deflected Strands	0	0	0	0	0	2														
	Distance Deflected Strands Raised (in.)	-	-	-	-	-	0														
	Release Strength (psi)	4500	4500	4500	4500	5000	5000														
	28 Day Strength (psi)	5000	5000	5000	5000	6000	6000														
	Design Camber @ Release (Plan-in.)	0.33	0.33	0.33	0.33	0.33	0.33														
	Design Camber @ Release (Modified-in.)	0.33	0.33	0.38	0.38	0.43	0.46														
	Absolute Difference in Camber @ Release (in.)	0.00	0.00	0.05	0.05	0.10	0.13														
BTE 65	Straight Strands		14	16	16	18	18														
	Deflected Strands		0	0	0	0	2														
	Distance Deflected Strands Raised (in.)		-	-	-	-	0														
	Release Strength (psi)		4500	4500	4500	5000	5000														
	28 Day Strength (psi)		5000	5000	5000	6000	6000														
	Design Camber @ Release (Plan-in.)		0.36	0.36	0.36	0.36	0.36														
	Design Camber @ Release (Modified-in.)		0.36	0.42	0.42	0.48	0.52														
	Absolute Difference in Camber @ Release (in.)		0.00	0.06	0.06	0.12	0.16														
BTE 70	Straight Strands			16	16	18	18														
	Deflected Strands			0	0	0	2														
	Distance Deflected Strands Raised (in.)			-	-	-	0														
	Release Strength (psi)			4500	4500	5000	5000														
	28 Day Strength (psi)			5000	5000	6000	6000														
	Design Camber @ Release (Plan-in.)			0.46	0.46	0.46	0.46														
	Design Camber @ Release (Modified-in.)			0.46	0.46	0.53	0.57														
	Absolute Difference in Camber @ Release (in.)			0.00	0.00	0.07	0.11														
BTE 75	Straight Strands				16	18	18	18													
	Deflected Strands				0	0	2	2													
	Distance Deflected Strands Raised (in.)				-	-	0	0													
	Release Strength (psi)				4500	5000	5000	5000													
	28 Day Strength (psi)				5000	6000	6000	6000													
	Design Camber @ Release (Plan-in.)				0.49	0.49	0.49	0.49													
	Design Camber @ Release (Modified-in.)				0.49	0.57	0.62	0.62													
	Absolute Difference in Camber @ Release (in.)				0.00	0.08	0.13	0.13													
BTE 80	Straight Strands					18	18	18	20	22											
	Deflected Strands					0	2	2	4	4											
	Distance Deflected Strands Raised (in.)					-	0	0	4	8											
	Release Strength (psi)					5000	5000	5000	5000	5000											
	28 Day Strength (psi)					6000	6000	6000	6000	6000											
	Design Camber @ Release (Plan-in.)					0.61	0.61	0.61	0.61	0.61											
	Design Camber @ Release (Modified-in.)					0.61	0.66	0.66	0.77	0.84											
	Absolute Difference in Camber @ Release (in.)					0.00	0.05	0.05	0.16	0.23											

* When combination pours are used for BTE150 and BTE155, the beam end debonding configuration shall be used at all beam ends.

		BTE 60	BTE 65	BTE 70	BTE 75	BTE 80	BTE 85	BTE 90	BTE 95	BTE 100	BTE 105	BTE 110	BTE 115	BTE 120	BTE 125	BTE 130	BTE 135	BTE 140	BTE 145	*BTE 150	*BTE 155
BTE 85	Straight Strands						18	18	20	22											
	Deflected Strands						2	2	4	4											
	Distance Deflected Strands Raised (in.)						0	0	0	6											
	Release Strength (psi)						5000	5000	5000	5000											
	28 Day Strength (psi)						6000	6000	6000	6000											
	Design Camber @ Release (Plan-in.)						0.71	0.71	0.71	0.71											
	Design Camber @ Release (Modified-in.)						0.71	0.71	0.85	0.91											
	Absolute Difference in Camber @ Release (in.)						0.00	0.00	0.14	0.20											
BTE 90	Straight Strands							18	20	22											
	Deflected Strands							2	4	4											
	Distance Deflected Strands Raised (in.)							0	0	4											
	Release Strength (psi)							5000	5000	5000											
	28 Day Strength (psi)							6000	6000	6000											
	Design Camber @ Release (Plan-in.)							0.73	0.73	0.73											
	Design Camber @ Release (Modified-in.)							0.73	0.89	0.97											
	Absolute Difference in Camber @ Release (in.)							0.00	0.16	0.24											
BTE 95	Straight Strands								20	22	24										
	Deflected Strands								4	4	4										
	Distance Deflected Strands Raised (in.)								0	0	0										
	Release Strength (psi)								5000	5000	5000										
	28 Day Strength (psi)								6000	6000	6000										
	Design Camber @ Release (Plan-in.)								0.96	0.96	0.96										
	Design Camber @ Release (Modified-in.)								0.96	1.04	1.19										
	Absolute Difference in Camber @ Release (in.)								0.00	0.08	0.23										
BTE 100	Straight Strands									22	24										
	Deflected Strands									4	4										
	Distance Deflected Strands Raised (in.)									0	0										
	Release Strength (psi)									5000	5000										
	28 Day Strength (psi)									6000	6000										
	Design Camber @ Release (Plan-in.)									1.11	1.11										
	Design Camber @ Release (Modified-in.)									1.11	1.24										
	Absolute Difference in Camber @ Release (in.)									0.00	0.13										
BTE 105	Straight Strands										24	26	28	30							
	Deflected Strands										4	6	6	8							
	Distance Deflected Strands Raised (in.)										0	0	4	12							
	Release Strength (psi)										5000	5000	5500	5500							
	28 Day Strength (psi)										6000	6000	6000	6000							
	Design Camber @ Release (Plan-in.)										1.31	1.31	1.31	1.31							
	Design Camber @ Release (Modified-in.)										1.31	1.51	1.57	1.58							
	Absolute Difference in Camber @ Release (in.)										0.00	0.20	0.26	0.27							

* When combination pours are used for BTE150 and BTE155, the beam end debonding configuration shall be used at all beam ends.

		BTE 60	BTE 65	BTE 70	BTE 75	BTE 80	BTE 85	BTE 90	BTE 95	BTE 100	BTE 105	BTE 110	BTE 115	BTE 120	BTE 125	BTE 130	BTE 135	BTE 140	BTE 145	*BTE 150	*BTE 155
BTE 110	Straight Strands											26	28	30	32						
	Deflected Strands											6	6	8	8						
	Distance Deflected Strands Raised (in.)											0	0	4	16						
	Release Strength (psi)											5000	5500	5500	6500						
	28 Day Strength (psi)											6000	6000	6000	7500						
	Design Camber @ Release (Plan-in.)											1.61	1.61	1.61	1.61						
	Design Camber @ Release (Modified-in.)											1.61	1.68	1.80	1.90						
	Absolute Difference in Camber @ Release (in.)											0.00	0.07	0.19	0.29						
BTE 115	Straight Strands												28	30	32						
	Deflected Strands												6	8	8						
	Distance Deflected Strands Raised (in.)												0	0	12						
	Release Strength (psi)												5500	5500	6500						
	28 Day Strength (psi)												6000	6000	7500						
	Design Camber @ Release (Plan-in.)												1.78	1.78	1.78						
	Design Camber @ Release (Modified-in.)												1.78	1.94	2.06						
	Absolute Difference in Camber @ Release (in.)												0.00	0.16	0.28						
BTE 120	Straight Strands													30	32	36	40				
	Deflected Strands													8	8	8	8				
	Distance Deflected Strands Raised (in.)													0	4	14	28				
	Release Strength (psi)													5500	6500	6500	7000				
	28 Day Strength (psi)													6000	7500	7500	8000				
	Design Camber @ Release (Plan-in.)													2.07	2.07	2.07	2.07				
	Design Camber @ Release (Modified-in.)													2.07	2.32	2.37	2.33				
	Absolute Difference in Camber @ Release (in.)													0.00	0.25	0.30	0.26				
BTE 125	Straight Strands														32	36	40	42			
	Deflected Strands														8	8	8	10			
	Distance Deflected Strands Raised (in.)														0	4	16	18			
	Release Strength (psi)														6500	6500	7000	7500			
	28 Day Strength (psi)														7500	7500	8000	8500			
	Design Camber @ Release (Plan-in.)														2.48	2.48	2.48	2.48			
	Design Camber @ Release (Modified-in.)														2.48	2.77	2.73	2.76			
	Absolute Difference in Camber @ Release (in.)														0.00	0.29	0.25	0.28			
BTE 130	Straight Strands															36	40	42			
	Deflected Strands															8	8	10			
	Distance Deflected Strands Raised (in.)															0	2	8			
	Release Strength (psi)															6500	7000	7500			
	28 Day Strength (psi)															7500	8000	8500			
	Design Camber @ Release (Plan-in.)															2.95	2.95	2.95			
	Design Camber @ Release (Modified-in.)															2.95	3.22	3.20			
	Absolute Difference in Camber @ Release (in.)															0.00	0.27	0.25			

* When combination pours are used for BTE150 and BTE155, the beam end debonding configuration shall be used at all beam ends.

		BTE 60	BTE 65	BTE 70	BTE 75	BTE 80	BTE 85	BTE 90	BTE 95	BTE 100	BTE 105	BTE 110	BTE 115	BTE 120	BTE 125	BTE 130	BTE 135	BTE 140	BTE 145	*BTE 150	*BTE 155
BTE 135	Straight Strands																40	42	44	48	
	Deflected Strands																8	10	12	12	
	Distance Deflected Strands Raised (in.)																0	0	6	14	
	Release Strength (psi)																7000	7500	7500	7500	
	28 Day Strength (psi)																8000	8500	9000	9500	
	Design Camber @ Release (Plan-in.)																3.34	3.34	3.34	3.34	
	Design Camber @ Release (Modified-in.)																3.34	3.59	3.59	3.56	
	Absolute Difference in Camber @ Release (in.)																0.00	0.25	0.25	0.22	
BTE 140	Straight Strands																	42	44	48	50
	Deflected Strands																	10	12	12	12
	Distance Deflected Strands Raised (in.)																	0	2	8	10
	Release Strength (psi)																	7500	7500	7500	8000
	28 Day Strength (psi)																	8500	9000	9500	10500
	Design Camber @ Release (Plan-in.)																	3.65	3.65	3.65	3.65
	Design Camber @ Release (Modified-in.)																	3.65	3.86	3.93	3.94
	Absolute Difference in Camber @ Release (in.)																	0.00	0.21	0.28	0.29
BTE 145	Straight Strands																		44	48	50
	Deflected Strands																		12	12	12
	Distance Deflected Strands Raised (in.)																		0	4	6
	Release Strength (psi)																		7500	7500	8000
	28 Day Strength (psi)																		9000	9500	10500
	Design Camber @ Release (Plan-in.)																		4.02	4.02	4.02
	Design Camber @ Release (Modified-in.)																		4.02	4.21	4.21
	Absolute Difference in Camber @ Release (in.)																		0.00	0.19	0.19
BTE 150	Straight Strands																			48	50
	Deflected Strands																			12	12
	Distance Deflected Strands Raised (in.)																			0	0
	Release Strength (psi)																			7500	8000
	28 Day Strength (psi)																			9500	10500
	Design Camber @ Release (Plan-in.)																			4.48	4.48
	Design Camber @ Release (Modified-in.)																			4.48	4.60
	Absolute Difference in Camber @ Release (in.)																			0.00	0.12
BTE 155	Straight Strands																				50
	Deflected Strands																				12
	Distance Deflected Strands Raised (in.)																				0
	Release Strength (psi)																				8000
	28 Day Strength (psi)																				10500
	Design Camber @ Release (Plan-in.)																				4.64
	Design Camber @ Release (Modified-in.)																				4.64
	Absolute Difference in Camber @ Release (in.)																				0.00

* When combination pours are used for BTE150 and BTE155, the beam end debonding configuration shall be used at all beam ends.