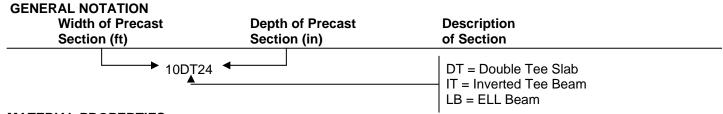


PREFACE TO PRODUCT LOAD TABLES

The following pages contain load tables for the standard products available from Coreslab Structures (ARIZ) Inc. Load capacities are in conformance with the American Concrete Institute "Building Code Requirements for Structural Concrete (ACI 318-05)". However, values given in the tables are intended for preliminary member selections, not final designs. These values assume that the safe superimposed load is composed of 60% dead load and 40% live load.

In some cases, loads in excess of those shown can be accommodated by modifying the general parameters such as concrete strength and/or reinforcing patterns.



MATERIAL PROPERTIES

Concrete:

Compressive Strength
Final (28-day) = 5000 psi (Precast)
= 3000 psi (Topping)
At Prestress Release = 3500 to 4000 psi when
maximum load is used.
Otherwise a lower

strength may be sufficient.

Normal Weight = 150 pcf Modulus of Elasticity = W 15 33 $\sqrt{f'c}$

Steel:

Prestressing Strand:
Sizes: 1/2" Diameter
Ultimate Strength = 270,000 psi
Initial Tension = 70 to 75% of Ult. Strength
Modulus of Elasticity = 28,000,000 psi

Reinforcing Steel:

Bar Sizes: 4, 5 and 6 are A706, Grade 60 Bar Sizes: 7 and larger are A615, Grade 60

FLEXURAL MEMBERS

In general, maximum spans shown for the various prestressing conditions will result in an upward camber under dead load, after loss of prestress has occurred. Roof deflection, however, should always be checked. It is recommended that a positive slope always be provided for roofs. Whenever span-to-depth ratio exceeds 30 for double tees a positive roof slope is essential to preclude ponding. Also, see the 2006 Edition "International Building Code" IBC.

Topping Slab Design by Others

For composite members, reinforcement (i.e., welded wire fabric or reinforcing bar) is generally required for the structural design of the topping slab. The Engineer of Record should furnish this design.

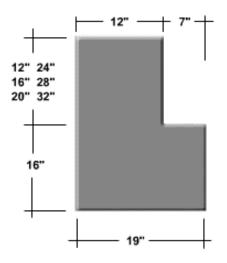
DESIGN RECOMMENDATIONS	Maximum Bottom Tension Stress	Range of Maximum Precast Span-To-Depth Ratio	
Double Tee Floor Slabs	12 $\sqrt{f'c}$	25 to 30	
Double Tee Roof Slabs	12 $\sqrt{f'c}$	35 to 40	
Inverted Tee or ELL Beams	$6\sqrt{f'c}$	10 to 20	
Hollow Core Slabs	$6\sqrt{f'c}$	45 to 50	

The required depth of a beam or slab is influenced by the ratio of live load to total load. When this ratio is high, deeper sections may be needed.



PRESTRESSED ELL BEAMS

Non-Composite ELL Beam - 16 inch Ledge

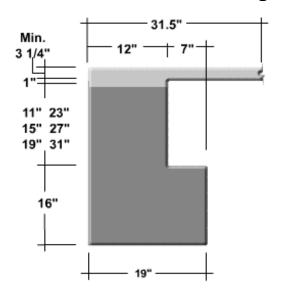




Allowable Su	perim	osec	l Serv	vice L	oad, l	Kips	per L	_inea	al Fo	ot	
Span(ft)	20	22	24	26	28	30	32	34	36	38	40
19LB28	7.7	7.1	6.4	5.8	5.1	4.5	3.8	3.2			
19LB32	9.4	8.7	8.0	7.3	6.6	5.9	5.1	4.4	3.6	2.8	
19LB36	11.6	10.7	9.8	8.9	8.0	7.1	6.4	5.8	5.1	4.4	3.8
19LB40	13.5	12.4	11.4	10.3	9.3	8.2	7.5	6.8	6.2	5.5	4.8
19LB44	15.6	14.4	13.1	11.9	10.6	9.4	8.7	7.9	7.2	6.5	5.8
19LB48	17.6	16.2	14.8	13.4	12.0	10.6	9.8	9.0	8.2	7.4	6.6

Beam Type 19LB28 19LB32 19LB36 19LB40	Depth (in) 28 32 36 40	Weight (plf) 462 512 562 612
19LB40	40	612
19LB44 19LB48	44 48	662 712

Composite ELL Beam - 16 inch Ledge





Allowable S	Superim	pose	d Ser	vice l	_oad,	Kips	per	Line	al Fo	ot	
Span(ft)	20	22	24	26	28	30	32	34	36	38	40
19LB27	7.4	6.8	6.1	5.4	4.8	4.3	3.9	3.5	3.0		
19LB31	9.1	8.3	7.6	6.9	6.2	5.6	5.1	4.5	3.9	3.3	
19LB35	10.9	10.1	9.2	8.4	7.6	6.8	6.2	5.7	5.2	4.7	4.2
19LB39	12.8	11.8	10.8	9.8	8.8	7.9	7.3	6.8	6.2	5.7	5.2
19LB43	14.8	13.6	12.4	11.3	10.1	9.0	8.4	7.8	7.2	6.6	6.0
19LB47	16.7	15.3	14.0	12.7	11.4	10.1	9.4	8.7	8.0	7.3	6.6

Beam Type	Depth (in)	Weight (plf)
19LB27	27	454
19LB31	31	504
19LB35	35	554
19LB39	39	604
19LB43	43	654
19LB47	47	704