

DESIGN TABLES FOR INDUSTRIAL FLOORS REINFORCED BY TABIX 1/45 or HE 1/50 STEEL FIBERS

January 99

CBR - value = 3% (k = 110 pci)																
Slab thickness (in.)		fibre dosage rate = 35 lb/cu.y.					fibre dosage rate = 50 lb/cu.y.					fibre dosage rate = 70 lb/cu.y.				
		Load case					Load case					Load case				
		Case 1 	Case 2 	Case 3 	Case 4 	Case 5 	Case 1 	Case 2 	Case 3 	Case 4 	Case 5 	Case 1 	Case 2 	Case 3 	Case 4 	Case 5
5.0	16186	13489	18614	5395	1441	17535	14613	20165	5845	1566	29450	21806	33867	8768	1566	
5.5	19558	16411	22492	6519	1525	21357	17760	24560	6969	1650	36644	26977	42140	10566	1650	
6.0	23155	19334	26629	7644	1587	25179	20907	28955	8093	1713	44063	32148	50672	12589	1713	
6.5	27427	22931	31541	8768	1650	29900	24729	34385	9442	1775	53505	38667	61530	14837	1775	
7.0	31923	26527	36711	10116	1713	34621	28776	39814	11016	1838	63171	45411	72647	17085	1838	
7.5	34396	30574	39555	11465	1775	39791	33047	45760	12364	1901	74187	52830	85315	19558	1901	
8.0	41590	34621	47828	12814	1838	45187	37543	51965	13938	1963	85203	60474	97983	22256	1963	
9.0	52830	44063	60755	16186	1942	57551	47660	66184	17310	2089	112405	78458	129265	28326	2089	
10.0	64970	54179	74715	19334	2047	70815	58675	81437	21132	2214	142529	98466	163908	34621	2214	



max. axle load for vehicles with 2 pneumatic tyres per axle / contact pressure = 0.6 Mpa



max. axle load for vehicles with 2 solid rubber tyres per axle / contact pressure = 3.0 Mpa



max. axle load for vehicles with 4 pneumatic tyres per axle / contact pressure = 0.6 Mpa



max. static rack load / min. distance between two loads = 1' / contact pressure = 4.0 Mpa



uniformly distributed load

Compressive concrete strength at 28 days = 30 Mpa

saw cut joint layout of 20' x 20' for fibre dosage rates of 35 and 50 lb/cu.y.

jointless design TAB-FLOOR for fibre dosage rates of 70 lb/cu.y.

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DESIGN TABLES FOR INDUSTRIAL FLOORS REINFORCED BY TABIX 1/45 or HE 1/50 STEEL FIBERS

January 99

CBR - value = 5% (k = 160 pci)																	
fibre dosage rate = 35 lb/cu.y.					fibre dosage rate = 50 lb/cu.y.					fibre dosage rate = 70 lb/cu.y.							
Slab thickness (in.)	Load case					Load case					Load case						
	Case 1	Case 2	Case 3	Case 4	Case 5	Case 1	Case 2	Case 3	Case 4	Case 5	Case 1	Case 2	Case 3	Case 4	Case 5		
5.0	17535	14388	20165	5845	1754	19558	15737	22492	6295	1880	33721	23830	38780	9442	1880		
5.5	21357	17310	24560	6969	1838	23605	19109	27146	7419	1984	41814	29450	48087	11465	1984		
6.0	25179	20458	28955	8318	1921	27652	22481	31799	8768	2068	51032	35070	58686	13489	2068		
6.5	29675	24279	34126	9667	2005	33047	26752	38004	10341	2151	62272	42264	71613	15961	2151		
7.0	34396	28101	39555	11016	2068	38442	31024	44209	11915	2235	73737	49458	84798	18659	2235		
7.5	39566	32372	45501	12364	2151	44063	35520	50672	13489	2318	82505	57776	94881	21357	2318		
8.0	44737	36644	51448	13938	2214	49908	40241	57394	15062	2381	100490	66094	115563	24055	2381		
9.0	57101	46760	65667	17535	2360	63621	51256	73164	18884	2527	133761	85877	153826	30799	2527		
10.0	70140	57551	80661	20907	2485	78234	63171	89969	22706	2673	171754	107908	197517	37768	2673		



max. axle load for vehicles with 2 pneumatic tyres per axle / contact pressure = 0.6 Mpa



max. axle load for vehicles with 2 solid rubber tyres per axle / contact pressure = 3.0 Mpa



max. axle load for vehicles with 4 pneumatic tyres per axle / contact pressure = 0.6 Mpa



max. static rack load / min. distance between two loads = 1' / contact pressure = 4.0 Mpa



uniformly distributed load

Compressive concrete strength at 28 days = 30 Mpa

saw cut joint layout of 20' x 20' for fibre dosage rates of 35 and 50 lb/cu.y.

jointless design TAB-FLOOR for fibre dosage rates of 70 lb/cu.y.

TREFFIL AREBED

DESIGN TABLES FOR INDUSTRIAL FLOORS REINFORCED BY TABIX 1.3/50 or HE 1.2/50 STEEL FIBERS

7/12/99

CBR - value = 3%																
fibre dosage rate = 35 lb/cu.y.					fibre dosage rate = 50 lb/cu.y.					fibre dosage rate = 70 lb/cu.y.						
Slab thickness (in.)	Load case					Load case					Load case					
	Case 1	Case 2	Case 3	Case 4	Case 5	Case 1	Case 2	Case 3	Case 4	Case 5	Case 1	Case 2	Case 3	Case 4	Case 5	
5.0	16636	13713	19131	5171	1441	17985	14837	20682	5620	1566	19558	15961	22492	6070	1671	
5.5	20233	16861	23268	6295	1525	21806	17985	25077	6744	1629	23605	19558	27146	7194	1754	
6.0	23830	19783	27404	7194	1587	25853	21357	29731	7868	1713	27876	22931	32058	8543	1817	
6.5	28101	23380	32316	8543	1650	30574	25179	35160	9217	1775	33047	27202	38004	9892	1901	
7.0	32597	27202	37487	9667	1713	35520	29450	40848	10566	1838	38442	31698	44209	11240	1984	
7.5	37093	31024	42658	11016	1775	40466	33497	46535	11915	1901	43838	35969	50413	12814	2047	
8.0	42489	35295	48862	12364	1838	46086	38218	52999	13489	1963	49908	41140	57394	14388	2109	
9.0	53954	44962	62047	15512	1942	58675	48784	67476	16636	2089	63621	52380	73164	17985	2235	
10.0	66543	55303	76525	18659	2047	72388	60024	83247	20233	2214	78234	64520	89969	21806	2360	



max. axle load for vehicles with 2 pneumatic tyres per axle / contact pressure = 0.6 Mpa

max. axle load for vehicles with 2 solid rubber tyres per axle / contact pressure = 3.0 Mpa

max. axle load for vehicles with 4 pneumatic tyres per axle / contact pressure = 0.6 Mpa

max. static rack load / min. distance between two loads = 1' / contact pressure = 4.0 Mpa

uniformly distributed load

Compressive concrete strength at 28 days = 30 Mpa

saw cut joint layout of 20' x 20'

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STANDARD APPLICATION FORM

for slab on grade and piled slab design

(please tick the boxes ☐ and fill in the form)

Project:	Customer:	Total surface: m ²
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GENERAL INFORMATION:

- Is the slab located ☐ inside a building **or**
☐ outside a building
- Is it ☐ a slab on grade **or**
 if yes, indicate - CBR-factor: % or
 k - value: N/mm³ of the soil
 - joint distance: m or
 pour area: m² for jointless floors
- ☐ a slab on piles (suspended slab)
 if yes, indicate - pile grid: m x m
 - pile type:
 - pile section: ☐ mm or
 ☐ mm x mm

LOADING INFORMATION:

1) Uniform distributed loading

U.D.L. = kN/m²

2) Static point loads

Singular point loads (e.g. mezzanine column, singular rack leg,...)

- load intensity: kN
- ☐ base plate size: mm x mm **or**
☐ contact pressure: N/mm²

Combined point loads (e.g. back-to-back racks,...)

- load 1: kN
 load 2: kN
 distance between loads: mm
- ☐ base plate size: mm x mm **or**
☐ contact pressure: N/mm²

3) Dynamic point loads (e.g. forklift, truck, lorry,...)

- load 1: type of vehicle:
 load intensity: kN/wheel
☐ contact pressure: N/mm² **or**
☐ type of wheel: (rubber, tyre, steel,...)
☐ number of load repetitions: **or**
☐ load safety factor to apply:
- load 2: type of vehicle:
 load intensity: kN/wheel
☐ contact pressure: N/mm² **or**
☐ type of wheel: (rubber, tyre, steel,...)
☐ number of load repetitions: **or**
☐ load safety factor to apply: (1.5 to 2.0)

STANDARD APPLICATION FORM

for slab on grade and piled slab design

(Please tick the boxes ☐ and fill in the form...)

Project:	Customer:	Total surface: sq. ft
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GENERAL INFORMATION:

Is the slab located ☐ inside a building or

☐ outside a building

Is it

☐ a slab on grade or

if yes, indicate

- CBR-factor: % or

k - value: pci of the soil

- joint distance: ft or

pour area: sq. ft for jointless floors

☐ a slab on piles (suspended slab)

if yes, indicate

- pile grid: ft x ft

- pile type:

- pile section: \emptyset in. or

☐ in. x in.

LOADING INFORMATION:

1) Uniform distributed loading

U.D.L. = psf

2) Static point loads

Singular point loads (e.g. mezzanine column, singular rack leg,...)

load intensity: lb.

☐ base plate size: in. x in. or

☐ contact pressure: psi

Combined point loads (e.g. back-to-back racks,...)

load 1: lb.

load 2: lb.

distance between loads: in.

☐ base plate size: in. x in. or

☐ contact pressure: psi

3) Dynamic point loads (e.g. forklift, truck, lorry,...)

load 1:

type of vehicle:

load intensity: lb./wheel

☐ contact pressure: psi or

☐ type of wheel: (rubber, tire, steel,...)

☐ number of load repetitions: or

☐ load safety factor to apply:

load 2:

type of vehicle:

load intensity: lb./wheel

☐ contact pressure: psi or

☐ type of wheel: (rubber, tire, steel,...)

☐ number of load repetitions: or

☐ load safety factor to apply: (1.5 to 2.0)