

必要地耐力(関東地域限定用)

単位(KN/㎡)

容量及び型式記号		土被り(m)																								
		0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	
40㎡	1 T40-I-A-0.0/1.0	44.9	46.7	48.5	50.3	52.1	53.9	55.7	57.5	59.4	61.2	63.0														
	2 T40-I-A-1.0/1.5											63.2	65.0	66.8	68.6	70.4	72.3									
	3 T40-I-A-1.5/2.3																72.3	74.1	75.9	77.8	79.6	81.4	83.2	85.0	86.8	
	4 T40-II-A-0.0/1.0	52.1	53.9	55.7	57.5	59.3	61.1	63.0	64.7	66.6	68.4	70.2														
	5 T40-II-A-1.0/1.6											70.3	72.1	73.9	75.7	77.5	79.3	81.1								
	6 T40-III-A-0.0/1.0	54.2	56.0	57.8	59.7	61.4	63.3	65.1	66.9	68.7	70.5	72.3														
	7 T40-III-A-1.0/1.5											72.4	74.2	76.0	77.8	79.6	81.5									
	8 T40-I-B-0.0/1.0	50.1	51.9	53.7	55.6	57.4	59.2	61.0	62.8	64.6	66.5	68.3														
	9 T40-I-B-1.0/1.5											68.5	70.4	72.2	74.0	75.8	77.6									
	10 T40-II-B-0.1/1.0		62.3	64.1	65.9	67.7	69.6	71.4	73.2	75.0	76.8	78.6														
60㎡	11 T60-I-A-0.0/1.0	44.2	46.0	47.8	49.6	51.4	53.2	55.0	56.8	58.6	60.4	62.2														
	12 T60-I-A-1.0/1.5											62.4	64.2	66.0	67.8	69.6	71.4									
	13 T60-II-A-0.0/1.0	46.0	47.8	49.6	51.4	53.2	55.0	56.8	58.6	60.4	62.2	64.0														
	14 T60-II-A-1.0/1.5											64.0	65.8	67.6	69.4	71.2	73.0									
	15 T60-III-A-0.0/1.0	47.5	49.2	51.0	52.8	54.6	56.4	58.2	60.0	61.8	63.6	65.4														
	16 T60-III-A-1.0/1.5											65.5	67.3	69.1	70.9	72.7	74.5									
	17 T60-I-B-0.0/1.0	49.1	50.8	52.6	54.4	56.2	58.0	59.8	61.6	63.4	65.2	67.0														
	18 T60-I-B-1.0/1.5											67.3	69.1	70.9	72.7	74.5	76.3									
	19 T60-II-B-0.1/1.0		54.0	55.8	57.6	59.4	61.2	63.0	64.7	66.6	68.4	70.2														
70㎡	20 T70-I-A-0.0/1.0	44.0	45.8	47.6	49.4	51.2	53.0	54.8	56.5	58.3	60.1	61.9														
	21 T70-I-A-1.0/1.5											62.2	64.0	65.8	67.6	69.4	71.2									
	22 T70-II-A-0.0/1.0	44.2	46.0	47.8	49.6	51.4	53.2	55.0	56.7	58.5	60.3	62.1														
	23 T70-II-A-1.0/1.5											62.2	64.0	65.8	67.6	69.4	71.2									
	24 T70-III-A-0.0/1.0	45.5	47.2	49.0	50.8	52.6	54.4	56.2	58.0	59.8	61.6	63.4														
	25 T70-III-A-1.0/1.5											63.5	65.3	67.1	68.8	70.6	72.4									
	26 T70-I-B-0.0/1.0	48.8	50.5	52.3	54.1	55.9	57.7	59.5	61.3	63.1	64.9	66.7														
	27 T70-I-B-1.0/1.5											67.0	68.8	70.6	72.4	74.2	76.0									
	28 T70-II-B-0.1/1.0		51.7	53.5	55.3	57.1	58.9	60.7	62.5	64.3	66.1	67.9														
80㎡	29 T80-I-A-0.0/1.0	43.9	45.6	47.4	49.2	51.0	52.8	54.6	56.4	58.2	60.0	61.8														
	30 T80-I-A-1.0/1.5											62.0	63.8	65.6	67.4	69.2	71.0									
	31 T80-II-A-0.0/1.0	42.9	44.6	46.4	48.2	50.0	51.8	53.6	55.4	57.2	59.0	60.8														
	32 T80-II-A-1.0/1.5											60.8	62.6	64.4	66.2	68.0	69.8									
	33 T80-III-A-0.0/1.0	44.0	45.7	47.5	49.3	51.1	52.9	54.7	56.5	58.3	60.1	61.9														
	34 T80-III-A-1.0/1.5											61.9	63.7	65.5	67.3	69.1	70.9									
	35 T80-I-B-0.0/1.0	48.6	50.3	52.1	53.9	55.7	57.5	59.3	61.1	62.9	64.7	66.5														
	36 T80-I-B-1.0/1.5											66.7	68.5	70.3	72.1	73.9	75.7									
	37 T80-II-B-0.1/1.0		50.0	51.8	53.6	55.4	57.2	59.0	60.8	62.6	64.4	66.2														
90㎡	38 T90-I-A-0.0/1.0	43.8	45.5	47.3	49.1	50.9	52.7	54.5	56.2	58.0	59.8	61.6														
	39 T90-I-A-1.0/1.5											61.9	63.7	65.5	67.2	69.0	70.8									
	40 T90-II-A-0.0/1.0	41.8	43.6	45.4	47.2	48.9	50.7	52.5	54.3	56.1	57.9	59.7														
	41 T90-II-A-1.0/1.5											59.8	61.6	63.3	65.1	66.9	68.7									
	42 T90-III-A-0.0/1.0	42.8	44.6	46.3	48.1	49.9	51.7	53.5	55.3	57.1	58.9	60.7														
	43 T90-III-A-1.0/1.5											60.7	62.5	64.3	66.1	67.9	69.7									
100㎡	44 T100-I-A-0.0/1.0	43.7	45.4	47.2	49.0	50.8	52.6	54.4	56.1	57.9	59.7	61.5														
	45 T100-I-A-1.0/1.5											61.8	63.6	65.4	67.1	68.9	70.7									
	46 T100-II-A-0.0/1.0	41.0	42.7	44.5	46.3	48.1	49.9	51.7	53.4	55.2	57.0	58.8														
	47 T100-II-A-1.0/1.5											58.9	60.7	62.5	64.2	66.0	67.8									
	48 T100-III-A-0.0/1.0	41.8	43.6	45.4	47.2	49.0	50.8	52.5	54.3	56.1	57.9	59.7														
	49 T100-III-A-1.0/1.5											59.8	61.6	63.3	65.1	66.9	68.7									
	50 T100-I-B-0.0/1.0	48.4	50.2	52.0	53.8	55.5	57.3	59.1	60.9	62.7	64.5	66.3														
	51 T100-I-B-1.0/1.5											66.3	68.1	69.9	71.7	73.4	75.2									
	52 T100-II-B-0.1/1.0		48.5	50.3	52.1	53.9	55.7	57.5	59.2	61.0	62.8	64.6														

・ビット部材PH500を使用の場合
 ・60㎡、70㎡は、中間ボックス T部材使用の場合

必要地耐力
 必要地耐力の算出は、次の式により求める。

$$(\text{必要地耐力}) = \frac{(\text{鉛直荷重})}{(\text{接地面積})}$$

$$= \frac{B+C+D+E+F}{A}$$

A: 接地面積 (㎡)
 = 水槽幅(m)×水槽長(m)

B: 土被り荷重 (kN)
 = 接地面積(㎡)×土被り厚(m)×土の単位体積重量 (17.7kN/㎡)

C: 上載荷重 (kN) →I型の場合
 = 接地面積(㎡)×10(kN/㎡)

D: 交通荷重 (kN) →II、III型の場合
 自動車2台の後輪直載の場合について検討する。
 交通荷重(kN)=自動車荷重(kN)×0.4×2×1.3×2 (自動車荷重 T-25の場合、低減係数0.9を乗ずる。)

E: 本体重量 (kN)
 本体、端面、ビット、調整部材の製品重量合計

F: 貯水重量 (kN)
 = 水槽の実容量(㎡)×水の単位体積重量(9.8kN/㎡)

- ボックスカルバート
- トンネル
- 鉄道
- 土留め・擁壁
- 用・排水
- 貯留
- 護床・護岸
- 災害対策
- 建築物
- 工作物
- 耐震
- 景観
- 生態系
- 水質保全・浄化
- 植生・緑化
- 維持管理
- 経済性向上
- 省力化
- 高性能
- 安全・安心
- NETIS・ARIC
- 評定・評価・認定