

Kwikstage Shoring

Introduction

Kwikstage Shoring Ties restrain the standards partly in rotation as well as position. This action reduces the effective length of the standard, which in turn increases the allowable axial load (leg load).

In a birdcage the Shoring Ties restrain the internal standards in four directions. Around the perimeter of a birdcage or when the equipment is erected in towers the Shoring Ties restrain the standards in only 2 or 3 directions, the rotational restraint is thus less than that for internal standards. The allowable working load is consequently reduced.

The vertical distance between Shoring Ties (lift height) as well as lift height above and below the lift being designed also effect the restraint conditions and effective length.

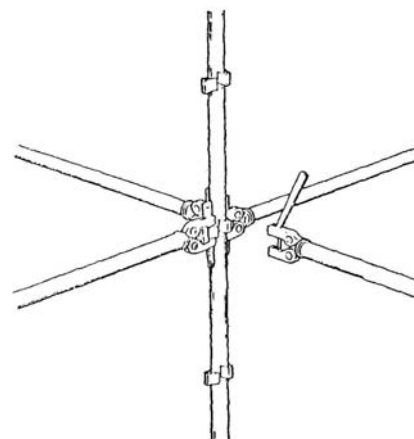
The above criteria have been taken into account in production of the allowable axial working load tables that follow. The allowable loads in perimeter standards are enhanced compared to previous technical information.

Your attention is drawn to the reduced working loads for internal standards with some of the less favourable lift height combinations and longer Shoring Tie lengths particularly with the Shoring 64 system.

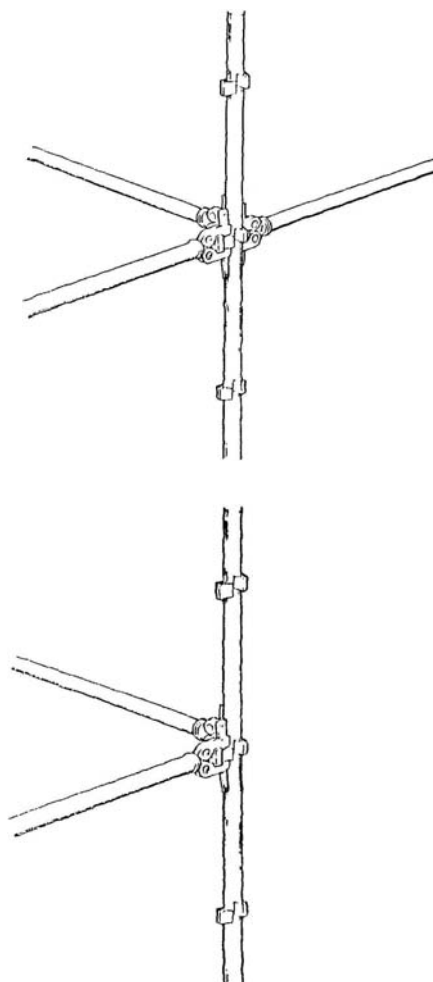
Where Shoring Ties of unequal length are used on each side of a standard, the allowable load in the standard may be found by taking the mean of the two values having equal length Shoring Ties on either side.

E.g. for a Shoring 75 scheme with 1200mm x 1800mm bays and 1981mm lift height the safe working load will be governed by the alternating 1200mm and 1800mm Shoring Ties. For a standard with 1981mm lifts above and below the AWL is $(64 + 60)/2 = 62\text{kN}$.

If the standard is at the edge of the structure the AWL is $(55 + 50)/2 = 52.5\text{kN}$



Internal Standard



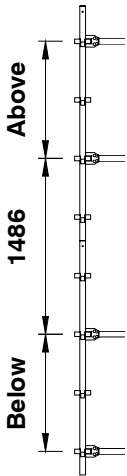
Perimeter Standards

TECHNICAL DATA

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SHORING 75

Allowable axial loads in standards with lift centres of Shoring Ties at 1486 mm



Internal Standards

	Lift		Shoring tie length				
	Above	Below	600 mm	900 mm	1200 mm	1800 mm	2400 mm
Jack		Jack	75	75	75	75	75
		495 mm	75	75	75	75	75
		991 mm	75	75	75	75	75
		1486 mm	75	75	75	75	75
495 mm		Jack	75	75	75	75	75
		495 mm	75	75	75	72	69
		991 mm	75	75	75	75	72
		1486 mm	75	75	75	75	74
991 mm		Jack	75	75	75	75	75
		495 mm	75	75	75	75	72
		991 mm	75	75	75	75	75
		1486 mm	75	75	75	75	75
1486 mm		Jack	75	75	75	75	75
		495 mm	75	75	75	75	74
		991 mm	75	75	75	75	75
		1486 mm	75	75	75	75	75

Perimeter Standards

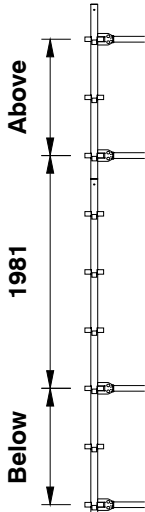
	Lift		Shoring tie length				
	Above	Below	600 mm	900 mm	1200 mm	1800 mm	2400 mm
Jack		Jack	75	75	75	75	75
		495 mm	75	75	75	74	71
		991 mm	75	75	75	75	72
		1486 mm	75	75	75	75	74
495 mm		Jack	75	75	75	74	71
		495 mm	75	72	69	66	63
		991 mm	75	75	72	68	65
		1486 mm	75	75	74	69	66
991 mm		Jack	75	75	75	75	73
		495 mm	75	75	72	68	65
		991 mm	75	75	75	69	68
		1486 mm	75	75	75	71	69
1486 mm		Jack	75	75	75	75	74
		495 mm	75	75	74	69	66
		991 mm	75	75	75	71	69
		1486 mm	75	75	75	72	69

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Allowable axial loads in standards with lift centres of Shoring Ties at 1981 mm

Internal Standards



Lift	Above	Below	Shoring tie length				
			600 mm	900 mm	1200 mm	1800 mm	2400 mm
Jack		Jack	64	64	64	64	64
		495 mm	64	64	64	59	55
		991 mm	64	64	64	62	58
		1486 mm	64	64	64	64	60
		1981 mm	64	64	64	64	61
495 mm		Jack	64	64	64	58	55
		495 mm	64	57	52	47	44
		991 mm	64	60	56	50	46
		1486 mm	64	62	58	53	48
		1981 mm	64	64	60	54	49
991 mm		Jack	64	64	64	62	58
		495 mm	64	60	56	50	46
		991 mm	64	64	60	54	50
		1486 mm	64	64	62	56	51
		1981 mm	64	64	64	57	52
1486 mm		Jack	64	64	64	64	60
		495 mm	64	62	58	53	48
		991 mm	64	64	62	56	51
		1486 mm	64	64	64	58	52
		1981 mm	64	64	64	59	54
1981 mm		Jack	64	64	64	64	61
		495 mm	64	64	60	54	49
		991 mm	64	64	64	57	53
		1486 mm	64	64	64	59	54
		1981 mm	64	64	64	60	55

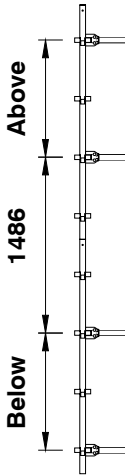
Perimeter Standards

Lift	Above	Below	Shoring tie length				
			600 mm	900 mm	1200 mm	1800 mm	2400 mm
Jack		Jack	64	63	64	60	55
		495 mm	64	59	55	51	47
		991 mm	64	62	58	52	49
		1486 mm	64	64	60	54	50
		1981 mm	64	64	61	55	50
495 mm		Jack	64	58	55	50	46
		495 mm	52	47	44	41	39
		991 mm	56	50	46	43	41
		1486 mm	58	53	48	44	42
		1981 mm	60	54	49	45	42
991 mm		Jack	64	62	58	52	48
		495 mm	56	50	46	43	41
		991 mm	60	54	50	44	42
		1486 mm	62	56	51	46	44
		1981 mm	64	57	53	47	44
1486 mm		Jack	64	64	60	54	50
		495 mm	58	53	48	44	42
		991 mm	62	56	51	46	44
		1486 mm	64	58	52	47	44
		1981 mm	64	59	54	48	45
1981 mm		Jack	64	64	61	55	50
		495 mm	60	54	49	45	42
		991 mm	64	57	53	47	44
		1486 mm	64	59	54	48	45
		1981 mm	64	60	55	50	46

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Allowable axial loads in standards with lift centres of Shoring Ties at 1486 mm



Internal Standards

	Lift		Shoring tie length				
	Above	Below	600 mm	900 mm	1200 mm	1800 mm	2400 mm
Jack		Jack	55	55	55	55	55
		495 mm	55	55	55	55	55
		991 mm	55	55	55	55	55
		1486 mm	55	55	55	55	55
495 mm		Jack	55	55	55	55	55
		495 mm	55	55	55	55	53
		991 mm	55	55	55	55	55
		1486 mm	55	55	55	55	55
991 mm		Jack	55	55	55	55	55
		495 mm	55	55	55	55	55
		991 mm	55	55	55	55	55
		1486 mm	55	55	55	55	55
1486 mm		Jack	55	55	55	55	55
		495 mm	55	55	55	55	55
		991 mm	55	55	55	55	55
		1486 mm	55	55	55	55	55

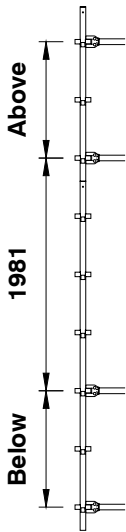
Perimeter Standards

	Lift		Shoring tie length				
	Above	Below	600 mm	900 mm	1200 mm	1800 mm	2400 mm
Jack		Jack	55	55	55	55	55
		495 mm	55	55	55	55	54
		991 mm	55	55	55	55	55
		1486 mm	55	55	55	55	55
495 mm		Jack	55	55	55	55	54
		495 mm	55	55	53	52	50
		991 mm	55	55	55	52	51
		1486 mm	55	55	55	53	51
991 mm		Jack	55	55	55	55	55
		495 mm	55	55	55	52	51
		991 mm	55	55	55	53	52
		1486 mm	55	55	55	54	53
1486 mm		Jack	55	55	55	55	55
		495 mm	55	55	55	53	52
		991 mm	55	55	55	54	53
		1486 mm	55	55	55	55	53

Kwikstage Shoring

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Allowable axial loads in standards with lift centres of Shoring Ties at 1981 mm



Internal Standards

Lift	Above	Below	Shoring tie length				
			600 mm	900 mm	1200 mm	1800 mm	2400 mm
Jack		Jack	40	40	40	40	40
		495 mm	40	40	40	40	40
		991 mm	40	40	40	40	40
		1486 mm	40	40	40	40	40
		1981 mm	40	40	40	40	40
495 mm		Jack	40	40	40	40	40
		495 mm	40	40	40	40	37
		991 mm	40	40	40	40	39
		1486 mm	40	40	40	40	40
		1981 mm	40	40	40	40	40
991 mm		Jack	40	40	40	40	40
		495 mm	40	40	40	40	39
		991 mm	40	40	40	40	40
		1486 mm	40	40	40	40	40
		1981 mm	40	40	40	40	40
1486 mm		Jack	40	40	40	40	40
		495 mm	40	40	40	40	40
		991 mm	40	40	40	40	40
		1486 mm	40	40	40	40	40
		1981 mm	40	40	40	40	40
1981 mm		Jack	40	40	40	40	40
		495 mm	40	40	40	40	40
		991 mm	40	40	40	40	40
		1486 mm	40	40	40	40	40
		1981 mm	40	40	40	40	40

Perimeter Standards

Lift	Above	Below	Shoring tie length				
			600 mm	900 mm	1200 mm	1800 mm	2400 mm
Jack		Jack	40	40	40	40	40
		495 mm	40	40	40	40	39
		991 mm	40	40	40	40	40
		1486 mm	40	40	40	40	40
		1981 mm	40	40	40	40	40
495 mm		Jack	40	40	40	40	39
		495 mm	40	40	37	35	34
		991 mm	40	40	39	37	35
		1486 mm	40	40	40	37	36
		1981 mm	40	40	40	38	36
991 mm		Jack	40	40	40	40	40
		495 mm	40	40	39	36	35
		991 mm	40	40	40	38	36
		1486 mm	40	40	40	39	37
		1981 mm	40	40	40	39	37
1486 mm		Jack	40	40	40	40	40
		495 mm	40	40	40	37	36
		991 mm	40	40	40	39	37
		1486 mm	40	40	40	40	38
		1981 mm	40	40	40	40	38
1981 mm		Jack	40	40	40	40	40
		495 mm	40	40	40	38	36
		991 mm	40	40	40	40	37
		1486 mm	40	40	40	40	38
		1981 mm	40	40	40	40	39