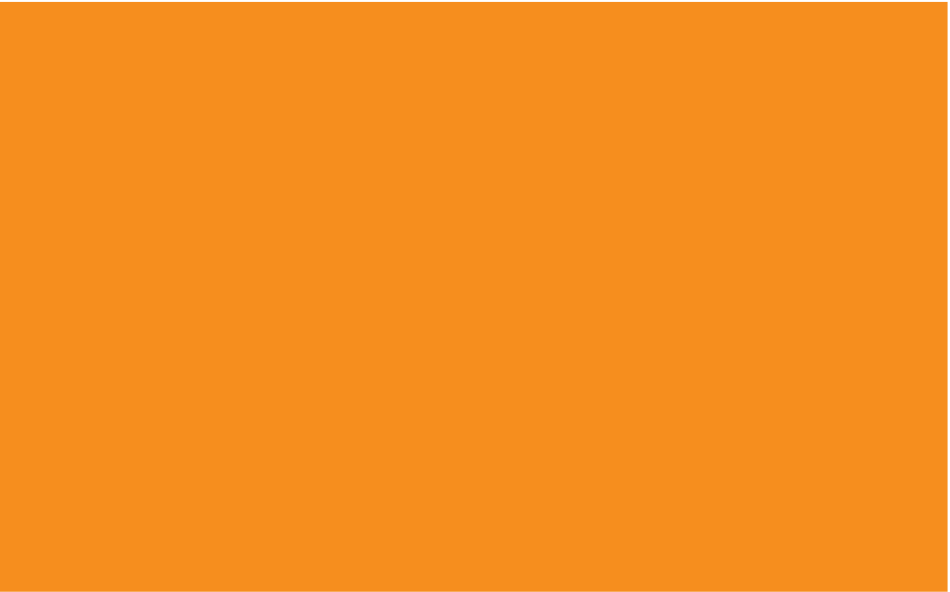
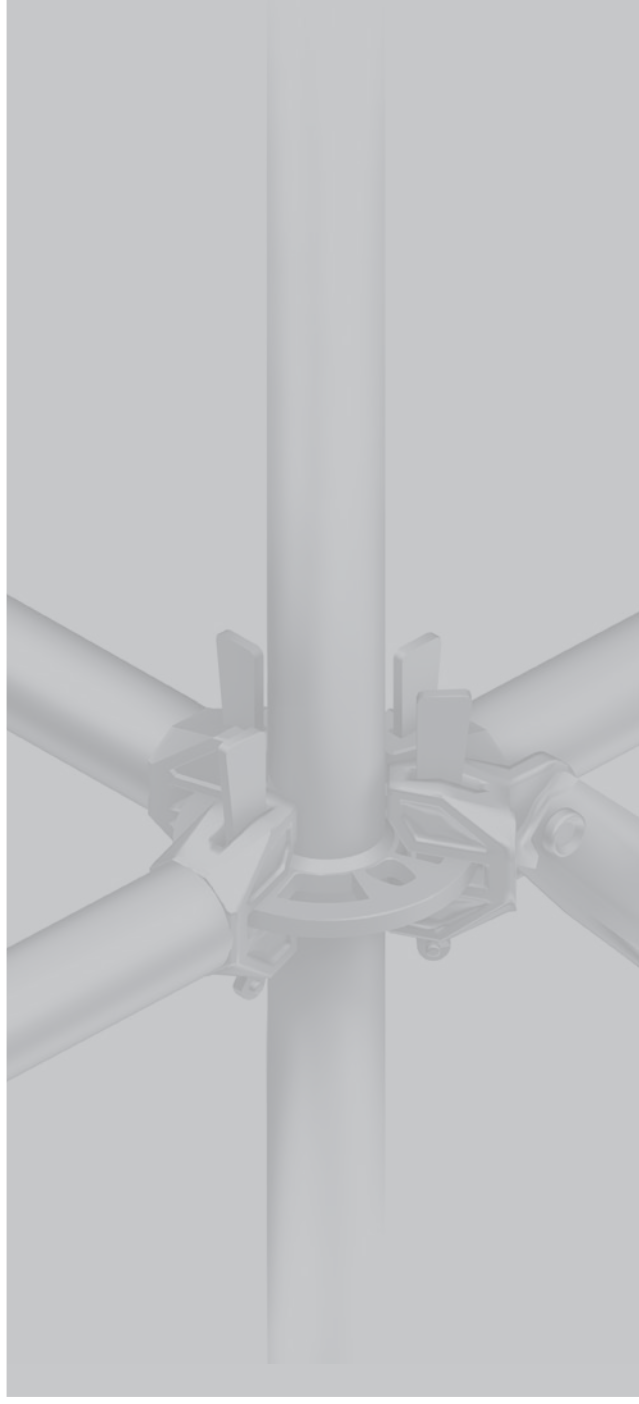


**PROSCAF**  
PROPPING



[www.proscaf.com](http://www.proscaf.com)

# PROPPING SECTION

## PROPPING USING PROSCAF SCAFFOLDING

Safe working loads for standards are tabled for the various configurations of plan layout, lift height and bracing patterns.

Safe working loads for Head jacks and base jacks are tabled for various extensions and horizontal loads.

Tables cover propping heights up to 6 metres and the maximum permissible vertical load that a standard can withstand relative to the lift heights.

- With lifts of 2.0 metres... up to **45 kN** per standard
- With lifts of 1.5 metres... up to **60 kN** per standard
- With lifts of 1.0 metres... up to **70 kN** per standard

For each propping project load concentrations shall be considered and if necessary double props shall be used.

Where the project engineer considers it appropriate to include environmental loads in the propping design then a specific analysis must be undertaken to determine whether standard bracing configurations are adequate or whether outrigger towers should be incorporated.

The tables give safe loads in conjunction with assumed horizontal loads applied at the top level of the propping and are given as a percentage of the applied load up to 5%.

As a general rule propping towers of up to 6.5 M should be subject to a horizontal load of 2% and above 6.5 M, 3% of the applied load.

As a general rule the height of a tower should not exceed 4 x the minimum base dimension.

Propping towers shall be erected on timber sole boards having a ground contact area of not less than 0.25 m<sup>2</sup> and laid on compacted or firm virgin ground. Care shall be taken to evaluate the consistency of the ground supporting the tower to guard against differential settlements that could de-stabilize the tower.



## PERMISSIBLE LOADINGS ON PROSCAF HEAD AND BASE JACKS

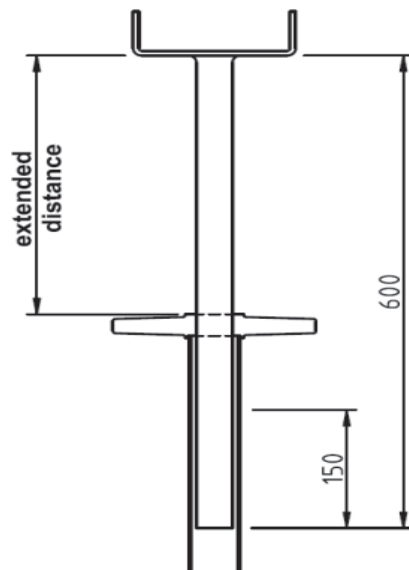
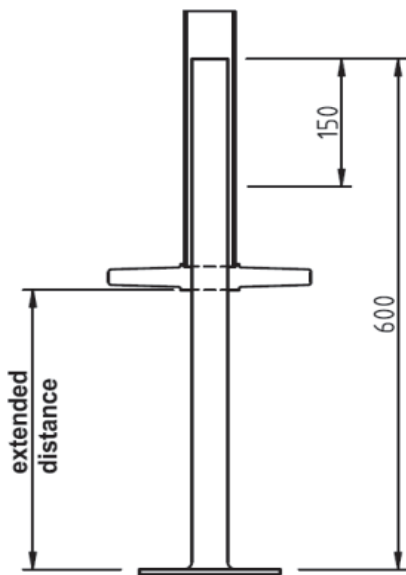
**TABLE 1**

Horizontal Load	Load Bearing Capacity of Proscaf Base Jack			
	Extended Distance (mm)			
	100	200	300	370
0%	62	59	54	48
1%	59	54	47	41
2%	54	46	38	32
3%	50	40	32	26
4%	47	36	27	23
5%	44	32	24	20

**TABLE 2**

Horizontal Load	Load Bearing Capacity of Proscaf Head Jack			
	Extended Distance (mm)			
	100	200	300	370
0%	107	93	76	60
1%	103	86	69	54
2%	94	75	58	45
3%	86	66	50	38
4%	80	58	44	34
5%	74	53	38	30

**NOTE:** These values assume that the bearers are located centrally over the head shaft



# PROPPING SECTION

## DIAGONAL BRACING CONFIGURATIONS AND ALLOWABLE PROSCAF STANDARD LOADINGS

**TABLE 3**

Permissible loading to Proscaf standards depending on diagonal bracing systems.

Bay Size mm	Diagonal Bracing Pattern	Permissible loadings on standards [kN] for total standard height 6.0 M and lift height 2.0 M	
		Middle Standard	Exterior Standard
730	A	34	34
	B	31	31
	C	29	29
	D	27	27
1090	A	43	35
	B	39	34
	C	38	32
	D	36	31
1400	A	44	36
	B	42	35
	C	40	34
	D	38	33
1570	A	45	37
	B	43	36
	C	41	35
	D	40	34
2070	A	45	37
	B	44	36
	C	42	36
	D	41	35
2570	A	44	37
	B	43	37
	C	42	36
	D	41	36
3070	A	44	37
	B	43	37
	C	42	36
	D	41	36

All propping towers shall be braced to resist horizontal loads according to the bracing patterns shown and in both directions as illustrated on the next page.



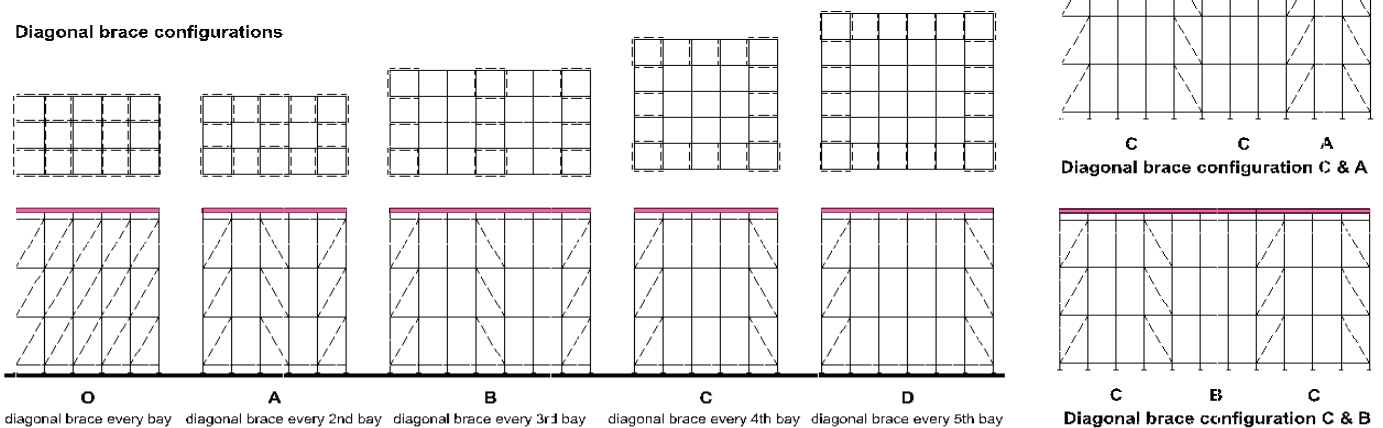
## DIAGONAL BRACING CONFIGURATIONS AND ALLOWABLE PROSCAF STANDARD LOADINGS

**TABLE 4**

Lift heights 1.5 M and 1.0 M.

Bay Size mm	Diagonal Bracing Pattern	Permissible loadings on standards [kN] for total standard height to 6.0 M			
		Lift height 1.5 M		Lift height 1.0 M	
		Middle Standard	Exterior Standard	Middle Standard	Exterior Standard
1570	O	61	53	73	63
	A	58	51	69	62
	B	57	50	67	60
	C	55	48	64	58
	D	54	47	61	55
2070	O	61	53	73	62
	A	59	52	70	62
	B	58	51	68	61
	C	57	50	67	60
	D	55	49	65	58
2570	O	60	52	72	63
	A	58	52	70	62
	B	57	51	69	61
	C	57	50	67	61
	D	56	49	67	59
3070	O	59	52	72	62
	A	58	51	70	62
	B	57	51	69	62
	C	57	50	68	61
	D	56	49	66	58

**Diagonal brace configurations**



# PROPPING SECTION

## LOAD BEARING CAPACITIES OF MAIN COMPONENTS

Allowable loading of decks: Steel decks that connect with tubular ledgers.

Bay Length	Duty Live Load
0.73 metre	≤ 6.6 kN / Bay (Heavy Duty)
1.09 metre	≤ 6.6 kN / Bay (Heavy Duty)
1.57 metre	≤ 6.6 kN / Bay (Heavy Duty)
2.07 metre	≤ 6.6 kN / Bay (Heavy Duty)
2.57 metre	≤ 6.6 kN / Bay (Heavy Duty)

### DO NOT EXCEED THE LOADINGS SHOWN IN THE ABOVE TABLE

Complies with AS/NZ51576.3 Requirements for heavy duty load.



Allowable loading of decks: Steel decks that connect with U transoms.

Bay Length	Duty Live Load
0.73 metre	≤ 6.6 kN / Bay (Heavy Duty)
1.09 metre	≤ 6.6 kN / Bay (Heavy Duty)
1.57 metre	≤ 6.6 kN / Bay (Heavy Duty)
2.07 metre	≤ 6.6 kN / Bay (Heavy Duty)
2.57 metre	≤ 6.6 kN / Bay (Heavy Duty)

### DO NOT EXCEED THE LOADINGS SHOWN IN THE ABOVE TABLE

Complies with AS/NZ51576.3 Requirements for heavy duty load.





## ALLOWABLE LOADING OF CANTILEVER BRACKETS

Tubular cantilever brackets 0.39m for 1 steel deck 0.32m wide.

**Note:** For steel decks with hooks that connect with tubular ledgers.

Bay Length	Duty Live Load
0.73	≤ 2.2 kN / Bay (Light Duty)
1.09	≤ 2.2 kN / Bay (Light Duty)
1.57	≤ 2.2 kN / Bay (Light Duty)
2.07	≤ 2.2 kN / Bay (Light Duty)
2.57	≤ 2.2 kN / Bay (Light Duty)

### DO NOT EXCEED THE LOADINGS SHOWN IN THE ABOVE TABLE

Complies with AS/NZ51576.3 Requirements for heavy duty load.



U cantilever brackets 0.73m for 2 steel decks 0.32m wide.

Bay Length	Duty Live Load
0.73	≤ 2.2 kN / Bay (Light Duty)
1.09	≤ 2.2 kN / Bay (Light Duty)
1.57	≤ 2.2 kN / Bay (Light Duty)
2.07	≤ 2.2 kN / Bay (Light Duty)
2.57	≤ 2.2 kN / Bay (Light Duty)

### DO NOT EXCEED THE LOADINGS SHOWN IN THE ABOVE TABLE

Complies with AS/NZ51576.3 Requirements for heavy duty load.





# **PRO**SCAF

NZ freephone: 0800 776 722  
AUS freephone: 1800 001 264  
Email: [sales@trade-source.co.nz](mailto:sales@trade-source.co.nz)

PO Box 62, Maungaturoto  
Northland, New Zealand

**[proscaf.com](http://proscaf.com)**