



Data Sheet

Dual Grade C350/C450L0 RHS

Hollow Sections

Revision: 20/08/2015

GENERAL DESCRIPTION

New Zealand Steel Just Black Dual Grade C350/C450 RHS is a range of structural and general-purpose cold formed electric resistance welded square and rectangular hollow sections.

These products are manufactured to meet the mechanical property requirements of both C350 and C450 and are suitable for welding and limited bending.

Just Black Dual Grade C350/450L0 hollow sections are suited to load bearing applications, have good torsional strength, impact strength and a high strength to weight ratio. Typical applications include agricultural, general engineering, mechanical handling and structural.

APPLICATIONS

- Agricultural implement frames
- Trailers
- Pallets and stock crates
- Sign gantries
- Service bridges
- Railings
- Columns and trusses

STANDARDS

- AS1163:2009 Grade C350/C450L0 Galvanizing
- AS/NZS 4792:2006

PACKING

Despatched material will be packed appropriately providing protection against weather and transit damage.

MECHANICAL PROPERTIES	
Min Yield Strength (MPa)	450
Min Tensile Strength (MPa)	500

MINIMUM ELONGATION % (G.L. $5.65\sqrt{S_0}$)			
	RHS (WIDTH ÷ THICKNESS)		
	≤15	>15 and ≤30	>30
C350 / C450	12	15	16

CHARPY IMPACT TESTING	
Gauge < 6mm	
Gauge ≥ 6mm	Min 27J Ave of 3 Tests

FABRICATING PERFORMANCE	
1 = Limited, 5 = Excellent	
Method	Rating
Drawing	-
Pressing	-
Bending	1
Roll Forming	-
Welding	5

AVAILABLE FORMS	
Black (Mill Finish)	
Galvanised (Limited Size Range)	
Pre-Primed	

AVAILABLE DIMENSIONS	
Thickness	2.0mm – 6.0mm
Squares	25x25 to 100x100
RHS	25x50 to 125x75

AVAILABLE LENGTHS		
	Length Range	Cut Tolerance
Normal	4.5m – 9.0m	-0.0mm, +20.0mm
Exact	4.5m – 9.0m	-0.0mm, +6.0mm

STANDARD LENGTHS	
Finish	Length (m)
Black	8.0
Galvanised	6.5 max
Pre Primed	8.0

New Zealand Steel Limited

Auckland
Tel. +64 9 375 8999
Fax. +64 9 375 8213
A BlueScope Steel Company

www.nzsteel.co.nz
nzsteel@bluescopesteel.com
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RECTANGULAR HOLLOW SECTIONS		
Nominal Size mm	Wall Thickness mm	Black Mass kg/m
50x25	2.0	2.15
	2.5	2.62
	3.0	3.07
65x35	2.0*	2.93
	2.5	3.60
	3.0	4.25
	4.0	5.35
75x40	2.5	4.18
	3.0	4.95
	4.0	6.29
75x50	2.0*	3.72
	2.5	4.58
	3.0	5.42
	4.0	6.92
	5.0	8.35
100x50	2.5	5.56
	3.0	6.60
	4.0	8.49
	5.0	10.30
102x76	3.5	9.09
	5.0	12.50
125x75	3.0	8.96
	4.0	11.60
	5.0	14.20
127x51	3.5	9.09
	5.0	12.50
* Only Grade C350 Available		

SQUARE HOLLOW SECTIONS		
Nominal Size mm	Wall Thickness mm	Black Mass kg/m
25x25	2.0	1.36
	2.5	1.64
	3.0	1.89
35x35	2.5	2.42
	3.0	2.83
	4.0	2.46
40x40	2.0	2.31
	2.5	2.82
	3.0	3.30
	4.0	4.09
50x50	2.0*	2.93
	2.5	3.60
	3.0	4.25
	4.0	5.35
	5.0	6.39
65x65	2.5	4.78
	3.0	5.66
	4.0	7.23
	5.0	8.75
75x75	2.5	5.56
	3.0	6.60
	4.0	8.49
	5.0	10.30
89x89	6.0	12.00
	3.5	9.07
	5.0	12.50
100x100	6.0	14.70
	3.0	8.96
	4.0	11.6
	5.0	14.2
	6.0	16.7
* Only Grade C350 Available		

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