

W STRAP AND MESH

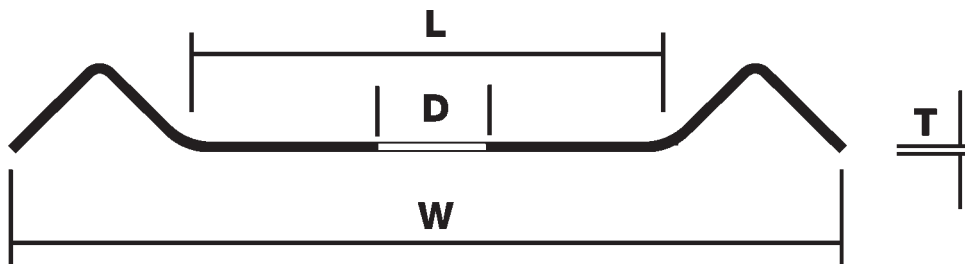
PRODUCT GROUP	PRODUCT	PRODUCT CODE PREFIX	DATA SHEET
W STRAP	180mm W Strap (Nominal Width)	MW	C1.1
	240mm W Strap (Nominal Width)	MW	C1.2
	280mm W Strap (Nominal Width)	MW	C1.3
MESH	Hingemesh™	-	C2.1

180mm

PHYSICAL DIMENSIONS

NOMINAL WIDTH	W	L	D	T	TYPICAL WEIGHT PER METRE	LIP	MATERIAL GRADE	TYPICAL YIELD STRENGTH
mm	mm	mm	mm	mm	kg			
180	178	100	44	1.9	2.95	No	AS/NZS1594 Gr.HU250	80kN

Yield strength of the 'W' Strap is based on the minimal cross section area.



GENERAL FEATURES

- W Strap is commonly used when additional support is required in conjunction with rock bolts. These steel straps are pulled into the rock surface by the bolts and tend to conform to major irregularities in the rock.
- W Straps provide a large surface confinement to loose rock, that may form between installed rock bolts.
- W Straps have a range of supply options being:-
 1. Multi-hole on 300mm centres or 'set holes' to suit individual applications. 44mm hole diameter is standard. Other hole diameters are available by negotiation.
 2. Elongated holes, 85x35mm, can be provided either in set locations in conjunction with round holes or fully multi-holed.
 3. Transverse elongated holes, 85x35mm, can be supplied in conjunction with items 1 & 2 by negotiation.
 4. "Service Line" slots, 28x8mm, can be supplied through one set of the W Straps vee's. These service line slots can be provided either in a multi-hole configuration or in set locations to suit individual needs.
Refer to Section E for the range of brackets available to suit the service line slots.
- If corrosion protection is required please contact your local DSI Arnall office for alternatives.

INSTALLATION GUIDE LINES

- Refer to DSI Arnall "Practical Guide to Rock Bolting" for installation practices.

STANDARD LENGTHS & PACKAGING

C1.1

- Standard W Strap lengths range from 600 to 8000mm in 300mm increments.
- W Straps are packed in bundles.
- Non-standard requirements are available by negotiation.

NOTES

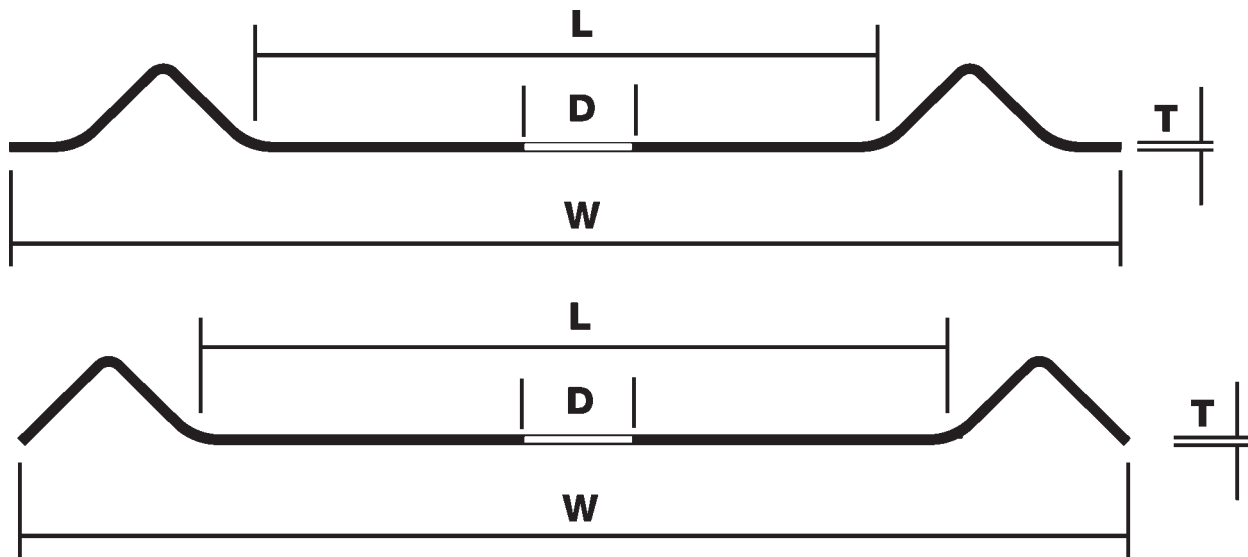
- Only DSI Arnall rock bolt components should be used to enable the optimum performance of the bolt system to be obtained.
- DSI Arnall Mining Products Division is Quality Assured to AS 9002, License No.406.



240mm

PHYSICAL DIMENSIONS

NOMINAL WIDTH	W	L	D	T	TYPICAL WEIGHT PER METRE	LIP	MATERIAL GRADE	TYPICAL YIELD STRENGTH
mm	mm	mm	mm	mm	kg			kN
240	235	150	44	1.9	3.72	No	AS/NZS1594 Gr.HU250	110
240	226	134	44	1.9	3.72	Yes	AS/NZS1594 Gr.HU250	110
240	234	134	44	1.9	3.78	Yes	AS/NZS1594 Gr.HA350	164



GENERAL FEATURES

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Note that 44mm hole diameter is standard. Other hole diameters are available by negotiation.
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These service line slots can be provided either in a multi-hole configuration or in set locations to suit individual needs. Refer to Section E for the range of brackets available to suit the service line slots.
 5. Domed or high angle deflection plates can be supplied welded to individual holes along the W Strap as required.
- If corrosion protection is required please contact your local DSI Arnall office for alternatives.

- Refer to DSI Arnall “Practical Guide to Rock Bolting” for installation practices.

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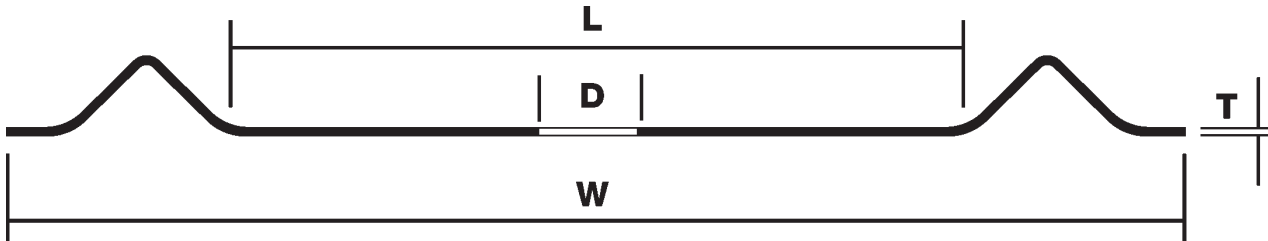
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280mm

PHYSICAL DIMENSIONS

NOMINAL WIDTH	W	L	D	T	TYPICAL WEIGHT PER METRE	LIP	MATERIAL GRADE	TYPICAL YIELD STRENGTH
mm	mm	mm	mm	mm	kg			
280	268	170	44	1.9	4.32	Yes	AS/NZS1594	180kN Gr.HA350



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These service line slots can be provided either in a multi-hole configuration or in set locations to suit individual needs. Refer to Section E for the range of brackets available to suit the service line slots.
 5. Domed or high angled deflection plates can be supplied welded to individual holes along the W strap as required.
 6. Steel mesh sheets can be supplied welded to the underside of these W Straps.
- Corrosion protection may be provided by hot dip galvanizing (refer to Section G).

- Refer to DSI Arnall “Practical Guide to Rock Bolting” for installation practices.

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STRATA CONTROL MINE MODULE

*Australian Design Application 23316/95
Patent Pending PP6632*

THE PRODUCT

DSI's Hingemesh™ strata control mine module comprises two welded steel wire mesh panels joined together which incorporate a mesh roof strap and loose rock retention mesh. A special feature of Hingemesh™ is its ability to fold down to a smaller unit for ease of transportability and placement.

DEVELOPMENT

The Hingemesh™ mine module was developed for "Oak North", Oak Creek Coal Pty Ltd, as there was need to develop a full roof cover support system. It was developed with the full consultation of the mine's engineers and "face" crew.

FEATURES

- Improved size for ease of transportation underground, (designed to suit mining unit)
- Compact unit
- Incorporates a twin roof strap and a loose strata retention mesh
- Flexibility of roof and rock bolt positioning
- Fold-out unit
- Ease of handling
- Manufactured to AS1303-1991 and AS1304-1991
- Available in galvanised, (corrosion resistance), or bright wire
- Lightweight, high strength module
- Ease of storage in pods, (typically up to 50 sheets)
- Eliminates joining of traditional w-strap and mesh

BENEFITS

- Promotes a safer working environment, (full roof cover)
- Defined areas for the placement of roof and rock bolts
- Facilitates improvement of advance rates
- Maximises surface area contact for strata control
- Ease of bolting using continuous mining equipment
- Eliminates the need to join traditional w-strap and mesh products
- Combination of strap and mesh results in reduced inventory and stock handling

TYPICAL APPLICATION

- Used to assist in the stabilisation and containment of rock strata
- Predominantly used in underground coal mines
- Can be used in metalliferous mines
- Used in conjunction with roof and rock bolts or other high strength bolting systems e.g. cable bolts
- Can be used with a variety of underground mining machinery

PRODUCT RANGE AND PACKAGING

- Module lengths are typically 4800mm.
- Module widths are typically 1755mm.
- Available in bundles ranging from 20 to 50 sheets.
- Available in bright, galvanised and heavy galvanised finishes.

Note: The dimensions and quantities shown above are typical only. If you have a specific requirement contact our technical representatives.

QUALITY

- DSI Arnall Mining Products Division is Quality Assured to AS 9002, License No.406.

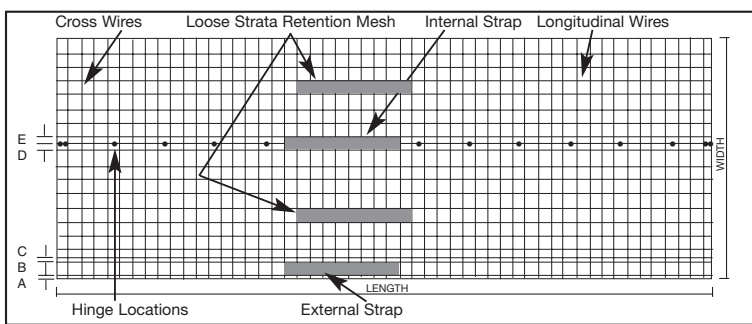
SERVICE AND PRODUCT DEVELOPMENT

- For enquiries please contact your local DSI Arnall Technical Sales Engineer.
- Products shown in this brochure are typical only. Please consult your local DSI Technical Representative for assistance in designing and manufacturing a module to suit your specific requirements.

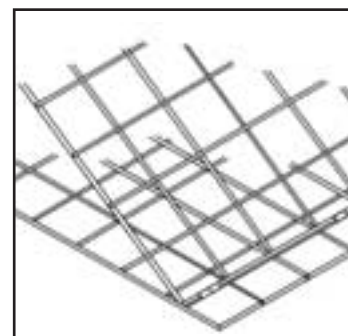
PRODUCT HINGEMESH™ (All dimensions are shown in mm)	ROOF STRAP MESH					LOOSE STRATA RETENTION MESH
	EXTERNAL STRAP			INTERNAL STRAP		
LONGITUDINAL WIRES						5.0
Wire Diameter	5.0					
Spacing(s) (Centres)	A 25	B 75	C 25	D 50	E 75	100
CROSS WIRES						
Wire Diameter	5.0					5.0
Spacing(s) (Centres)	100					100

Module Width	1755	
Module Length	4800	
Tensile Strength of Wire (Max)	Bright Galvanised	750MPa
Weight	30.9kg	

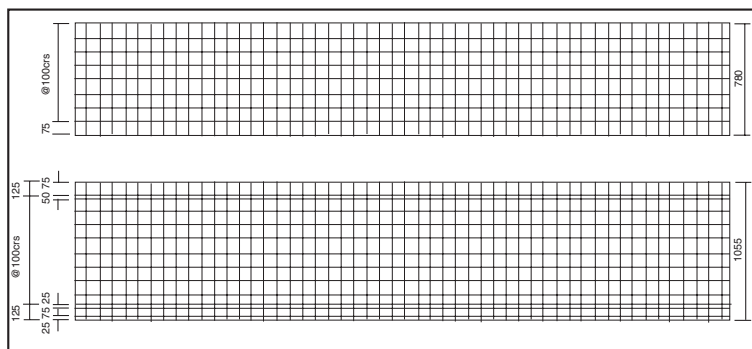
Product Code	Width(mm)	Length(mm)	Wire Type
WH52448	1755	4800	HVY Galvanised
WG52448	1755	4800	STD Galvanised
WB52448	1755	4800	Bright



Assembled Plan View



Enlarged fragmentary perspective view partly folded



Disassembled Plan View

