

DLM WALLACE SILVER BRAZING ALLOYS

Product Description:

Silver brazing alloys are used as a material for joining or bonding ferrous and non-ferrous base metals like copper, brass, steel and stainless steel.

They are commonly used in the plumbing, gas, HVAC and refrigeration industries for the joining of metal pipes and fittings, such as copper and brass.

Scope of use:

DLM Wallace Silver Brazing are used for the braze joining of pipes and fittings for gas, water, HVAC and refrigeration systems.

Relevant building code clauses:

- B2 Durability – B2.3.1 (a) (b) (c), B2.3.2 (a) (b)
- G10- Piped services- G10.3.1 (a) (b),
- G11- Gas as an energy source- G11.3.1, G11.3.5 (a) (b)
- G12- Water Supplies- G12.3.1, G12.3.2 (a)(b)(c), G12.3.7 (a)(b)
- F2 Hazardous Building Materials – F2.3.1

Contribution to code compliance:

B2 Durability – B2.3.1 (a) (b) (c), B2.3.2 (a) (b)

Installed in accordance with DLM Wallace literature, DLM Wallace Silver Brazing Alloys will meet the above durability performance requirements of NZBC- B2

G10- Piped services- G10.3.1 (a) (b)

DLM Wallace Silver Brazing Alloys are manufactured and supplied in accordance with AS1167-1: 2005, and thus satisfy the requirements of G10/AS1, G11/AS1.

G10/AS1 – Table 1: Acceptable Standards for Piping Systems

Material: Copper

Acceptable Jointing: Copper-phosphorous brazing alloy to AS1167-1

G11- Gas as an energy source- G11.3.1, G11.3.5 (a) (b)

G11/AS1 – 4.0.1 G10/AS1 is an acceptable solution for the installation of pipework to supply gas as an energy source.

F2 Hazardous Building Materials – F2.3.1

Prior to working with DLM Wallace Silver Brazing Alloys, installers and handlers should familiarise themselves with the health and safety guidelines offered in the DLM Wallace Silver Brazing Alloy Material data sheet

Standards:

DLM Wallace Silver Brazing Alloys are manufactured to AS/NZS 1167.1-2005.

2%, 5% and 15% Silver Brazing Alloys have Watermark Certification.

Composition:

DLM Wallace Silver Brazing Alloys are supplied in various grades, ranging from 2% silver content to 56% silver content.

They are supplied in 750mm rods, with diameter ranging from 1.6mm to 3.0mm.

DLM WALLACE- SILVER BRAZING ALLOYS- MANUFACTURED IN ACCORDANCE WITH AS/NZS 1167.1:2005											
Item Code	Description	Tip Colour	SPEC	Composition %					Melting Point (Degrees Celcius)		
				CU	CuP	AG	SN	ZN	Solidus Temp	Liquidus Temp	Working Temp
*A22.0, *A22.5, *A23.0	2% Silver Braze 750mm	Yellow	BCuP-6	Rem	6-7	2			645	790	730-815
	Typically used for water systems, brazing copper to copper without the need of flux. Copper to brass requires the use of CA602 brazing flux paste. Not suitable for use with ferrous metals. MAP gas required.										
*A52.5, *A53.0	5% Silver Braze 750mm	Silver	BCuP-3	Rem	5.75-6.5	5			645	815	720 - 815
	Typically used for gas systems, brazing copper to copper without the need of flux. Copper to brass requires the use of CA602 brazing flux paste. Not suitable for use with ferrous metals. MAP gas required										
A151.5, *A152.5, *A153	15% Silver Braze 750mm	Brown	BCuP-5	Rem	4.5-5.5	15			645	800	705 - 815
	Typically used for air-conditioning systems, brazing copper to copper without the need of flux. Suitable for joints with close tolerances. Copper to brass requires the use of CA602 brazing flux paste. Not suitable for ferrous metals. MAP gas required										
*Ag341.5, *Ag342.5	34% Silver Braze 750mm	Green	BAG-7B	31		34	2	33	630	730	730 - 830
	General purpose low melting point silver brazing alloy. Can be used on steel, stainless steel, copper and brass. Requires the use of CA602 brazing flux paste. Can be used with butane gas.										
*Ag451.5, *Ag452.5	45% Silver Braze 750mm	Dark Red	BAG-5S	30		45		25	670	750	750-850
	General purpose low melting point silver brazing alloy. Can be used on steel, stainless steel, copper and brass. Requires the use of CA602 brazing flux paste. Can be used with butane gas.										
*Ag501.5	50% Silver Braze 750mm	Palm Green	BAG-6	34		50		16	690	775	775 - 870
	General purpose low melting point silver brazing alloy. Can be used on steel, stainless steel, copper and brass. Requires the use of CA602 brazing flux paste. Can be used with butane gas.										
*Ag561.5	56% Silver Braze 750mm		BAG-7	22		56	5	17	620	650	650-760
	Suitable for joining steels including mild, carbon, stainless steel, tungsten carbide. Also suitable for various copper alloys. Requires the use of CA602 brazing flux paste.										

Limitations:

- Ensure that the appropriate alloy specification is used for the base materials being brazed.
- AS/NZS 3501-2021

2.7.3.1 – Copper and copper alloys

Silver brazing alloys used for capillary braze jointing of copper and copper alloys must have a minimum silver content of 1.8%, and a maximum cadmium content of 0.05%

2.7.3.2- Stainless steels

Silver brazing alloys used for capillary braze jointing of stainless steels must have a minimum silver content of 38%, and a maximum cadmium content of 0.05%

- All DLM Wallace Silver Brazing Alloys are cadmium free.

Installation Requirements:

- 2%, 5% and 15% brazing alloys generally do not require the use of brazing flux when brazing copper to copper.
- Use gas type, flux type and temperature range as listed in the composition table.
- Clean the surfaces of all pipes and fittings to be brazed to remove all oxides.
- Deburr pipe ends and form a slight chamfer.

Maintenance Requirements:

There are no specific maintenance requirements for silver brazing alloys.

Exposed brazing joints should be inspected on occasion for joint integrity.

Warning and Bans:

DLM Wallace Silver Brazing Alloys are not subject to warning or ban under section 26 of the Building Act 2004

Place of Manufacture:

Overseas

Distributor Details:

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