

Apollo (A7521)



Single-Part, Polyurethane Adhesive for Panel Bonding

Apollo (A7521) is a single-component, moisture-curing, polyurethane adhesive. Apollo developed the adhesive to be used specifically for applications in the panel manufacturing and laminating industries.

Benefits:

- Extremely versatile and durable: bonds a wide range of materials.
- Suitable for a wide range of markets: used for the manufacture of various panels, including doors, cold stores and SIP's.
- Complete peace of mind: due to its high-strength weatherproof bond and excellent temperature resistance.
- Minimises task-time: single-component adhesive with a low coat weight and excellent coverage.

Technical Data

Base	Polyurethane	Flash Point	See MSDS
Appearance	Light brown	Shelf Life	9months (5°C-25°C)
Viscosity	3500-6500 cps (20°C)	Storage	5°C-30°C
Solids	93-97%	Environmental	Hazardous/ Non-Flammable
Heat Resistance	Approx. 120°C	Cleaner	Solvent 6 or 9
Coverage	8-12m ² /kg		

Processing Guide

Temperature	15°C	17.5°C	20°C	22.5°C	25°C
Open-Time (Minutes)	55	47	40	32	25
Cure-Time (Minutes)	125	105	90	75	60

Weight of adhesive: 100-120gsm²
Water overmist: 10-15gsm²

Note: Data measured from when the water overmist is applied. The open and cure-times will vary according to various factors, including temperature, weight of adhesive supplied, weight of water overmist, method of working and the substrates being bonded. Thus, such processes should always be determined by on-site trials/experiment.



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Instructions for Use:

Surface preparation/priming

1. Materials to be bonded should be clean and free from dust, grease and other contaminants.
2. Metals should be stored in a warm environment, prior to bonding, to avoid chilling of the glue-line (which can lead to extended cure times).

Note: Most pre-finished metals have backing coats which are well-suited to adhesive bonding (sufficient adhesion can be achieved with no primer required in most cases). However, certain grades of Aluminium, Galvanised Steel and Plastics may require the use of a primer; a trial panel should be prepared in all cases when new materials are to be used in order to determine compatibility levels.

Application

1. The adhesive should be applied evenly over one side of each glue-line using a mechanical roller coater, hand-roller or notched trowel. The amount applied will vary according to the porosity of the substrates, but will normally be in the range of 100-125gsm.
2. After application of the adhesive, a fine mist of atomised water must be applied to the adhesive. The amount required being approximately 10% of the weight of adhesive. The surfaces to be bonded should then interface as quickly as possible to minimise water evaporation, and placed under pressure within the open-time of the adhesive. The pressure required will depend on the nature of the substrates being bonded – but is usually in the range of 0.5 to 0.9bar.
3. Pressure should be maintained, until the adhesive is sufficiently cured to permit handling of the bonded item. Full cure of the adhesive is not obtained for 24 hours and handling within this period should be kept to a minimum.

IMPORTANT NOTES

Storage and handling: The product should be stored unopened in a dry condition at a temperature of 5-25°C. This will ensure the stated shelf-life. The adhesive will have a limited life once the container is opened.

Temperature and timings: All information on temperature and timings represent normal working conditions and is provided as a guideline only. However, please contact Apollo for advice if you wish to operate outside of these parameters.

Disclaimer: Apollo has taken care to ensure that the information provided in the literature is correct and up to date. However, it is not intended to form any part of a contract or provide a guarantee. Purchasers/intending purchasers should contact Apollo to check whether there have been any changes to the information since publication of the literature. Please ensure you have read the hazard labels and material safety data sheet before using this product.

