



## THE GILL CORPORATION

HIGH PERFORMANCE COMPOSITE PRODUCTS SINCE 1945

The Gill Corporation  
Airline Instruction Manual  
AIM 2001 – Revision K  
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### Instructions for the Installation, Fabrication, and Repair of Cargo Liners for Airbus Aircraft

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# 1 Introduction

This manual contains instructions and guidance for the customers of The Gill Corporation (TGC) for the manufacturing of semi-finished cargo liner laminates, panels, and decompression panels for the lower deck cargo compartments of Airbus aircraft A300, A310, A300-600, A320, A321, A318, A319, A330, A340, A350 and A380. The replacements cargo liners are qualified to Airbus Technical Specifications 2550 M1M 000801, V5013SP1803901 and 5010 M1M 001001, and the h-profile edge attachments are qualified to 2550 M1M 000404. All cargo liners and h-profiles are approved/certified by Airbus Operations GmbH.

Complex replacement lining and decompression panel configurations can be produced from the semi-finished, large sized sheet material using relatively inexpensive and readily available tools, equipment, adhesives, and edge filling compounds. The fabrication methods were designed for use in typical airline maintenance and repair shop under Part 145 Maintenance Approval. For compliance with the Airbus specification and approval of the cargo liners, only the materials specified and described in this manual may be used. Alternative components or combinations might not provide the mechanical or flammability performance levels required by governing airworthiness authorities and/or Airbus Operations. In the event of any questionable or uncertain procedure or material, the applicable Airbus cargo lining CMMM, is valid for the parts described in this manual.

To meet the various Airbus specified geometric and physical property requirements for all aircraft types, five laminates, twelve sandwich panels (Types E and N are equivalent), and four h-profile decompression panel attachment constructions were designed. The Gill Corporation laminate, panel, and h-profile decompression panel types are summarized in section 3. Airbus appropriate CMMM must be consulted for the exact panel types and locations, and must be followed carefully to maintain compliance with Airbus requirements. The exact liner and decompression panel configurations, i.e. final shape, size, openings, mounting holes, etc., can be determined using the existing part as a template, or, refer to the Airbus CMMM.

This instruction manual contains all applicable information on cargo liner laminates and panels, h-profiles, fabrication of decompression panels.

For local manufacture, the following documents are required:

- A300/ A310-CMMM 25-50-02 Cargo Lining
- A350-CMMM 50-13-00 Cargo Lining
- SA-CMMM 25-50-00 Cargo Lining
- A330/ A340-CMMM 25-50-01 Cargo Lining
- A380-CMMM 50-13-01 Cargo Lining
- AIM: This document, provided by the supplier

## Safety Precautions

Before using any of the chemical materials specified or recommended in this manual, the manufacturer's material safety data sheet for each product must be obtained and its safety practices observed. Safety Data sheets for the products used in this document can be found on The Gill Corporation website. In all cases, direct exposure by skin contact, inhalation, or ingestion must be avoided, at the very least requiring the use of eye protection and protective clothing. Good ventilation and lighting are essential. In areas where flammable solvents are in use, the absence of sources of ignition is mandatory. Local safety requirements should be followed where applicable.

## 1.1 Revision History

Revision	Date	Notes
N/C		
A	2000-06-13	Corrections. Modified figures for mounting configurations. Added drawings and information for decompression panels. Added product and safety data sheets for adhesive, edge fillers, and Gillpatch III
B	2001-01-05	Changed SRM References to AMM. Changed Airbus designations to specific aircraft.
C	2001-05-30	Adjustments to formatting. Added table with typical panel weights versus OEM panel weights. Added table with suppliers of panel parts. Added adhesive for h-profile installation.
D	2003-03-04	New information added on the fabrication of decompression panels for Airbus A330/A340 aircraft. Several illustrations and drawings have been added to help clarify instructions for the various fabrication procedures.
E	2015-06-26	Added h-profiles for 4422-307 panels. Changes in drawings and descriptions related to rapid decompression. Information regarding the locations where panels are allowed was removed and replaced with references to the AMM.
F	2017-05-01	Epocast 1638 edge filler was removed, because Huntsman no longer sells this product. Alexit 495-14 approved for decompression ceiling panel configurations. Drawings were added to clarify procedure for using semi-finished products to replace OEM panels with plugs.
G	2019-10-28	Added Panel Type P and A350. Added new information for special cases during the fabrication of decompression panels from semi-finished products versus the OEM configurations. Additional photos were added to provide examples of machining techniques. This document also includes comprehensive changes in the formatting and structure to help with navigation and readability of the document.
H	2020-08-25	Added 3M EC3524B/A edge fill and reference to A350CMM. Replaced references to Airbus IPC and IPD with ISI and CMM.
I	2021-1-27	Added references to A380 and specification 5010 M1M 001001. Added 4522 Type Q panel.
J	2022-8-22	Referencing to CMM changed to CMMM and ISI (In Service Instruction) references deleted to match Airbus document changes. Added example from Partition FR-24A AD design.
K	2023-7-6	Added section 7.14, detail for A380 horizontal walkway without plug

## 2 Description of Cargo Lining Function

The aircraft has two lower deck cargo holds, one in the forward (FWD) and one in the after (AFT) section of the fuselage. Each hold may consist of one or more compartments, each of which contains cargo lining.

### 2.1 Fire Protection

The lining must seal the cargo compartment from the surrounding structure to provide an enclosed area to contain a fire and ensure the effectiveness of the fire extinguishing media.

### 2.2 Aircraft Component Protection

The lining must protect various electrical, mechanical, and hydraulic systems from damage, which can be caused by the loading and unloading of bulk and containerized cargo.

### 2.3 Pressure Compensation

The lining provides a means of pressure equalization between the pressurized cabin and cargo hold during aircraft ascent or descent. Additional pressure compensation is provided among the cabin, cargo hold, and surrounding area in the event of a rapid decompression by means of specially constructed decompression panels.

### 3 Approved TGC Cargo Compartment Products for Airbus Aircraft

#### 3.1 Cargo Liner Laminates – Identification and Reference Properties

The Gill Corporation Product Designation*	Airbus Type	Laminate Thickness - Reference - mm (inch)	Laminate Areal Weight - Typical - kg/m <sup>2</sup> (lb/ft <sup>2</sup> )	Laminate Areal Weight - OEM Reference - maximum kg/m <sup>2</sup> (lb/ft <sup>2</sup> )
Gillfab 1369A-013	1	0.33 (0.013)	0.59 – 0.64 (0.120 – 0.130)	0.69 (0.141)
Gillfab 1369A-025	2	0.63 (0.025)	1.12 – 1.22 (0.230 – 0.250)	1.22 (0.250)
Gillfab 1369A-040	3	1.02 (0.040)	1.76 – 1.95 (0.360 – 0.400)	1.96 (0.401)
Gillfab 1369A-045	4	1.14 (0.045)	2.05 – 2.20 (0.420 – 0.450)	2.40 (0.492)
Gillfab 1369A-060	5	1.52 (0.060)	2.64 – 2.93 (0.540 – 0.600)	2.82 (0.578)

\*1367A products can be used in place of 1369A products of the same thickness throughout this document.



### 3.2 Cargo Liner Sandwich Panels – Identification and Reference Properties

The Gill Corporation Product Designation	Airbus Type	Panel Thickness - Reference - mm (inch)	Panel Areal Weight - Typical - kg/m <sup>2</sup> (lb/ft <sup>2</sup> )**	Panel Areal Weight - OEM Reference - maximum kg/m <sup>2</sup> (lb/ft <sup>2</sup> )
Gillfab 4422-295	A	7.5 (0.295)	2.10 (0.430)	1.38 (0.284)
Gillfab 4422-307	B	7.8 (0.307)	2.70 (0.554)	1.88 (0.385)
Gillfab 4422-315	C	8.0 (0.315)	2.71 (0.556)	2.32 (0.475)
Gillfab 4422-366***	D***	9.3 (0.366)	2.14 (0.439)	1.47 (0.300)
Gillfab 4422-386*	E/N*	9.8 (0.386)	2.78 (0.569)	2.41 (0.493)
Gillfab 4422-413	F	10.5 (0.413)	2.32 (0.476)	1.52 (0.312)
Gillfab 4422-508	G	12.9 (0.508)	2.44 (0.500)	1.64 (0.336)
Gillfab 4422-610	H	15.5 (0.610)	2.66 (0.545)	1.76 (0.361)
Gillfab 4422-630	K	16.0 (0.630)	2.66 (0.545)	2.59 (0.531)
Gillfab 4422-331	L	8.4 (0.331)	2.57 (0.527)	1.23 (0.252)
Gillfab 4422-346	M	8.8 (0.346)	2.60 (0.532)	1.97 (0.403)
Gillfab 4422-547	P	13.9 (0.547)	3.50 (0.718)	2.989 (0.612)
Gillfab 4522 <sup>†</sup>	Q <sup>†</sup>	9.5 (0.374)	2.97 (0.609)	1.255 (0.257)

<sup>†</sup> 4522 panels require application of non-slip paint (see chapter 12)

\*\*\* 4422-366 is approved for all applications of Type D in A350 Aircraft except for partition C19.

\*\* Typical panel weights for all types exceed OEM Reference panel weights. The higher weights provide significantly increased level of durability, and will reduce the frequency of replacing damaged panels.

\* Gillfab 4422-386 is equivalent to Airbus Types E and N.

### 3.3 H-Profile – Identification and Reference Properties for h-profiles and Corresponding Cargo Liner Panels

The Gill Corporation Product Designation	Airbus Type	Panel Thickness - Reference - mm (inch)	Corresponding The Gill Corporation h-profile Designation	Airbus Type	Width of Channel - Reference - mm (inch)
Gillfab 4422-295	A	7.5 (0.295)	Gillfab 3072A	A	8.2 (0.323)
Gillfab 4422-307	B	7.8 (0.307)	Gillfab 3072A	A	8.2 (0.323)
Gillfab 4422-315	C	8.0 (0.315)	Gillfab 3072A	A	8.2 (0.323)
Gillfab 4422-366	D	9.3 (0.366)	Gillfab 3072B	B	10.0 (0.394)
Gillfab 4422-386*	E	9.8 (0.386)	Gillfab 3072B	B	10.0 (0.394)
Gillfab 4422-508	G	12.9 (0.508)	Gillfab 3072C	C	13.1 (0.516)
Gillfab 4422-610	H	15.5 (0.610)	Gillfab 3072D	D	16.0 (0.630)

**Note:** To ensure correct functioning of the decompression panel assembly, the corresponding sandwich panel and h-profile must be used together. Failure to follow this procedure can cause a change in the geometry of the assembly, resulting in possible malfunctioning during a decompression event.

## 4 Cargo Liner Repair and Replacement

### 4.1 Application and Identification

Airbus applicable cargo lining CMMM must be consulted for the exact panel types, valid drawings and locations, and must be followed carefully to maintain compliance with Airbus requirements.

### 4.2 Cargo Liner Repair

**Note:** If cargo liner repairs are required, the approved procedures are defined in the Airbus AMM.

### 4.3 Cargo Liner Laminate Fabrication

Refer to section 5 for recommendations for the machining of cargo laminates and sandwich panels. For exact sizes, attachments, openings, etc., Airbus cargo lining CMMM must be consulted. In some cases, the liner being replaced can serve as a template for fabricating the replacement.

### 4.4 Cargo Liner Sandwich Panel Fabrication

Refer to section 3 for the application and identification of liner panels to be replaced. The replacement panel must be of the same type and configuration as the panel being replaced. In all cases of the installation of replacement cargo liner panels, Airbus cargo lining CMMM must be consulted, and is considered the overall governing document.

**Note:** All replacement panels must be edge-filled before installation. See section 6.1 and section 8 for materials and procedure.

### 4.5 Gillfab Manufacturer Information

Gillfab 1369A cargo liner laminates and Gillfab 4422 and 4522 sandwich panels are manufactured and supplied by:

The Gill Corporation  
4056 Easy Street  
El Monte, California 91731  
U.S.A.

Telephone: +1 626-443-6094  
Email: info@thegillcorp.com

### 4.6 Ceiling and Sidewall Locations for Mounting Configurations

Airbus cargo lining CMMM must be consulted for the exact panel types and locations used, and must be followed carefully to maintain compliance with Airbus requirements.

#### 4.7 Marking and Identification of Components

The Identification of each component shall be permanent and legible in accordance with the “General technical requirements” / ABD0100. Each component must be provided with an identification giving at least the following information.

- a.) On each semi-finished panel:
  - I.) Supplier’s code in accordance with Federal Supplier Code for Manufacturers (FCSM) or North Atlantic Treaty Organization (NATO)
  - II.) Designation of product
  - III.) Date of manufacture (month and year only)
  - IV.) Batch number (No.)
- b.) The finished replacement panel identification marking has to be described as follows on back of the replacement panel side:
  - I.) Supplier’s code in accordance with Federal Supplier Code for Manufacturers (FCSM) or North Atlantic Treaty Organization (NATO)
  - II.) Original AI – part No. and part No. of the manufacturer
  - III.) Product name of semi-finished panel material
  - IV.) Manufacturer date of semi-finished panel material
  - V.) Batch No. of semi-finished panel material
  - VI.) Designation of top side
  - VII.) Manufacturing date of the finished replacement panel

The Identification marking shall be resistant to liquids and detergents normally used in aircraft.

## 5 Machining of The Gill Corporation Composite Products

This section contains recommendations for cutting, drilling, and routing of cargo liner laminates (Gillfab 1369A series) and sandwich panels (Gillfab 4522 and 4422 series). The information can be useful for the fabrication of the semi-finished material into exact replacement articles.

The cargo liner Laminates are composed of a fiberglass-reinforced/phenolic resin binder. While this is not particularly difficult to drill or cut, certain precautions and tools should be used to prevent delamination, tearing, singeing, or fuzzing of the reinforcing fibers/resin.

The sandwich panels are composed of fiberglass reinforced/phenolic resin facings bonded to Nomex/phenolic resin honeycomb core. Care must be taken in the fabrication of replacement panels to avoid disbonding, delamination, tearing, singeing, fuzzing of the fiber, or crushing of the core.

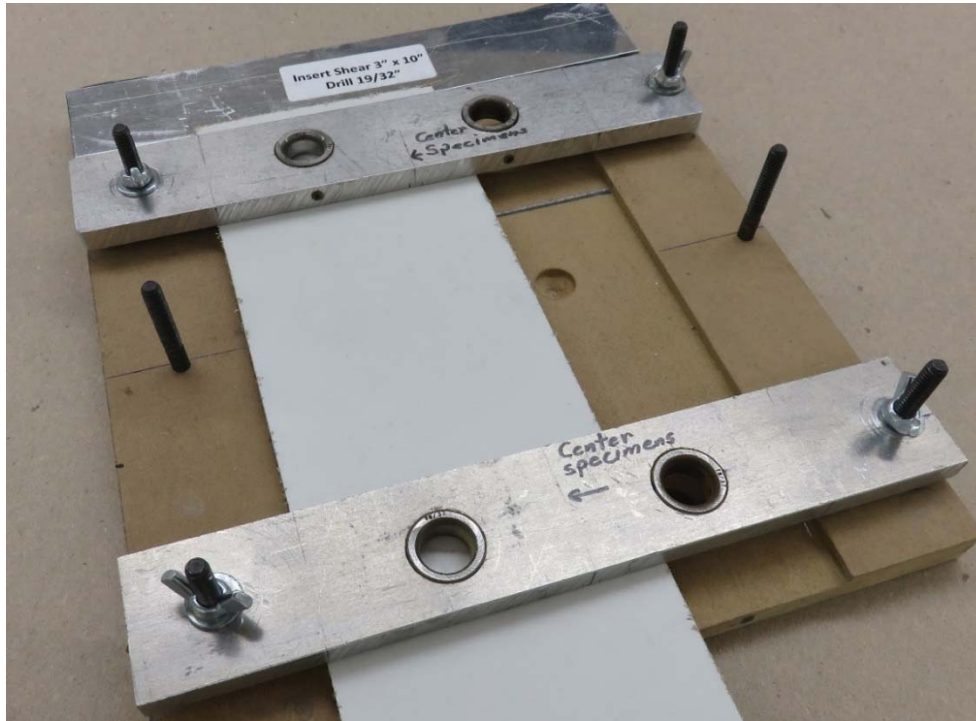
### 5.1 Drilling

#### 5.1.1 Tooling Recommendations for Drilling

Drill Type	Information
High Speed Steel	<ul style="list-style-type: none"> <li>- Lowest initial cost, readily available.</li> <li>- Short drill life, especially in fiberglass.</li> <li>- About 500 holes in fiberglass between sharpening.</li> <li>- Improved with a hard flash of chrome plating (0.003" - 0.005") is put on the drill bit.</li> <li>- Flash chrome is recommended for large drills where carbide is too expensive.</li> </ul>
Tungsten Carbide	<ul style="list-style-type: none"> <li>- Higher initial cost but longer life. May be re-sharpened.</li> <li>- Up to 3/16" diameter, grind drill to have a slight negative rake on the cutting tip.</li> <li>- Over 3/16" diameter, use slow helix drill, ground to 55° point (sharp).</li> <li>- Recommended for high production requirements only.</li> </ul>
Diamond-Grit Edged Drills	<ul style="list-style-type: none"> <li>- For fiberglass only. Most expensive, but longest lasting, fastest and smoothest cutting.</li> <li>- Recommended for high volume only.</li> <li>- May be recoated at near initial cost, 40 grit recommended for most Gill fiberglass products.</li> <li>- 10,000 surface feet per minute is customarily available on 10,000-20,000 rpm router.</li> <li>- Will drill a hole 3 times as fast as a carbide drill.</li> <li>- Dust collection system mandatory.</li> <li>- Cannot be used with drill bushings or slip-renewables.</li> </ul>
Fiberglass Drill/Router	<ul style="list-style-type: none"> <li>- Solid carbide, fairly expensive.</li> <li>- Must be returned to manufacturer for sharpening.</li> <li>- Produces clean fuzz-free holes in most fiberglass without delamination, especially in thin (less than 0.060") fiberglass.</li> <li>- Cuts quickly without tearing, delaminating, or fuzzing the fibers around the hole.</li> </ul>

### 5.1.2 Drilling Template with Bushings

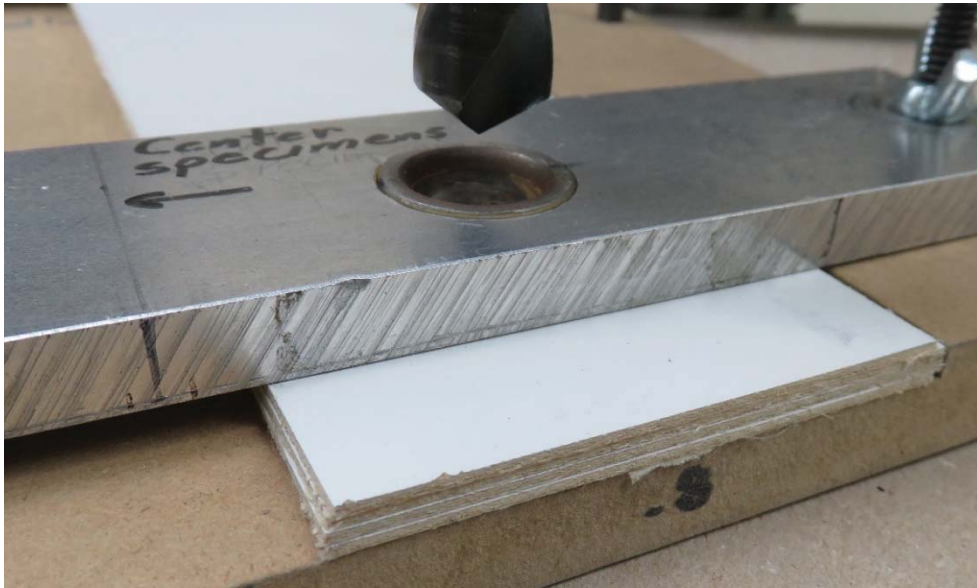
For any work requiring center to center hole tolerance of  $\pm 0.03$  inches (0.8 mm) or less, the use of a drill template with hardened steel bushings is recommended. Good tooling will speed production and provide accurate repeatability of the hole pattern. For small jobs (less than 15 holes) a removable bushing (slip renewable) may be used. It is not as accurate as pressed bushings, but the tooling cost will be reduced.



For holes requiring close tolerance diameters  $\pm 0.005$  inches (0.13 mm) or less, a pilot hole should first be drilled through a bushing, then the hole counterbored to the final diameter. Sandwich panels with honeycomb cores should also be back-drilled (counterbored through the back skin) since the pilot hole in soft cores will not hold the counterbore pilot steady. Drilling a hole without the use of drill bushing will often produce egg-shaped holes since most drill chucks do not turn in a perfectly circular path, and the operator cannot hold the drill at a perfect  $90^\circ$  angle to the work piece. Using a drill press or a portable drill guide will simplify drilling holes at  $90^\circ$  to the material surface. Whenever possible, many facilities drill holes slightly larger than they are actually needed in order to eliminate the need for tooling and drill bushing.

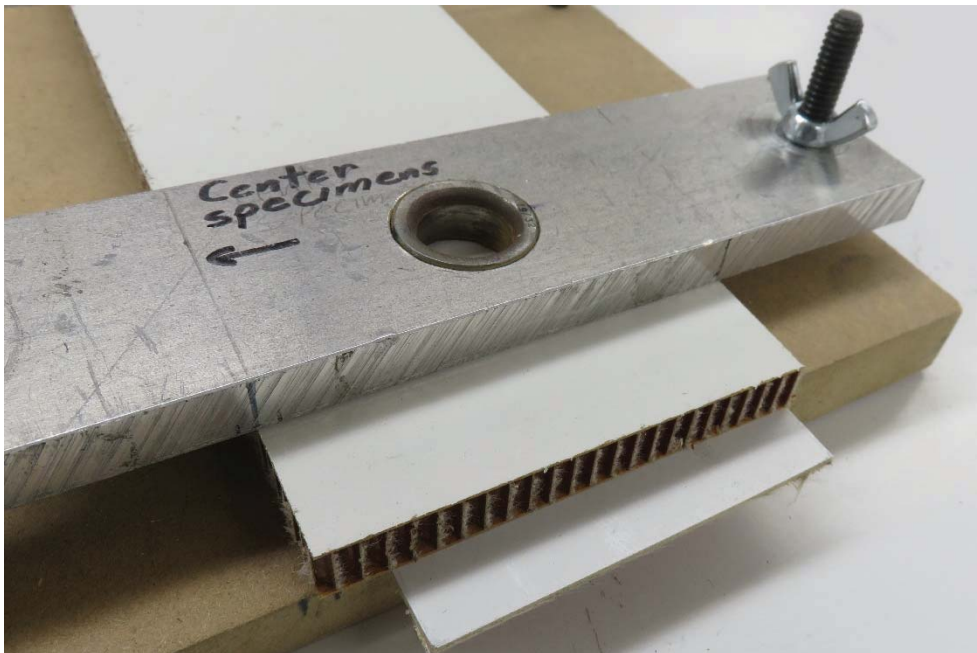
### 5.1.3 Stacked Drilling of Multiple Laminates

Drilling multiple stacked parts is a fast way to drill many identical holes in several pieces, as long as they are firmly clamped together and to the template. However, center-to-center tolerance will usually suffer, especially on the last part in the stack. When drilling deep holes, lift the drill out occasionally to clear away dust or chips. This will prevent galling or binding and will produce a cleaner, fuzz-free hole.



### 5.1.4 Backing Material Used to Support the Panel for Drilling

It can also be useful to place an extra layer of undrilled cardboard, chip board, or excess laminate beneath the bottom layer being drilled. This helps prevent fuzzing on the last layer.



## 5.2 Cutting and Routing

### 5.2.1 Tooling Recommendations for Cutting and Routing

Method	Information
<b>Band Saws</b>	<ul style="list-style-type: none"> <li>- Not recommended, slow cut, difficult to control, but can be used for rough cut on loose tolerances.</li> <li>- Will dull rapidly, but gives a fair cut even when dull and is inexpensive to replace.</li> <li>- Fence should be used to control the cut as much as possible</li> <li>- Most The Gill Corporation products may be cut with a standard 8-10 tooth/inch band saw.</li> </ul>
<b>Circular Saw</b>	<ul style="list-style-type: none"> <li>- Typically, 12" to 16" diameter carbide tipped or diamond saw blades are used.</li> <li>- Diamond blades are coated 40 grit.</li> <li>- Extra care must be taken to ensure that the laminates do not delaminate or singe.</li> <li>- For worker comfort and general good housekeeping, a good vacuum system for dust collection is a must.</li> <li>- Recommended blade speeds are shown in the table below</li> </ul>
<b>Shearing (Laminates Only)</b>	<ul style="list-style-type: none"> <li>- Laminates can be cut with a mechanical shear, available in many maintenance shops.</li> <li>- For the thickest laminates, a heavy-duty, sharp blade shear is required to prevent delamination or tearing</li> <li>- The thinner laminates (0.025" and below) can be cut by means of heavy-duty handheld scissors.</li> <li>- Extra care must be taken to tearing, delamination, or fuzzing of the fibers.</li> <li>- Reduces the amount of dust generated.</li> </ul>
<b>Routing</b>	<p><u>Recommended Router Bits are as followed:</u></p> <p>Fiberglass Router – Best, inexpensive, can be sharpened. Best with rigid laminates.</p> <p>Diamond Grit – Will cut and clog; longest life; can be cleaned.</p> <p>Carbide Tip – Dulls rapidly, not recommended.</p>

#### Circular Saw Recommended Blade Speeds

Blade Diameter	Revolutions per Minute	Surface Feet per Minute
8	4500	9400
10	4000	10500
12	3600	11300
16	3450	14500

## 5.3 Deburring

All machined and cut edges of the panel must be deburred to remove any fibers which might have become exposed during machining operations to ensure a clean, debris-free surface for subsequent bonding or edge filling procedures.



## 6 Approved Materials for Cargo Liner Repair and Fabrication

The sources for the approved materials below are the manufacturers of those items, however, these items are available from a number of local distributors for these types of materials.

### 6.1 Approved Edge Filling Compounds

The following edge fill materials are approved for use with The Gill Corporation cargo liner panels.

#### 6.1.1 Alexit® FST 495-14: two part edge filling compound

This material is approved for use in the fabrication of all panel types.

**Manufacturer:**

Mankiewicz Gebr. And Co., GmbH  
Georg-Willhelm-Str. 189  
D-21107 Hamburg (Wilhelmsburg)  
Germany

Telephone: (040) 75103-0

Website: [www.mankiewicz.com](http://www.mankiewicz.com)

U.S. Office:  
Mankiewicz Coatings L.L.C.  
1200 Charleston Regional Parkway  
Charleston, SC 29492

Telephone: 843-654-7755

Website: [www.mankiewicz.com/english](http://www.mankiewicz.com/english)

#### 6.1.2 3M Scotch-Weld EC3524B/A: two part edge filling compound

This material is approved for use in the fabrication of all panel types.

**Manufacturer:**

U.S. Office:  
3M Corporate Headquarters  
3M Center  
St. Paul, Minnesota 55144-1000

Telephone: (888) 364-3577

Website: [www.3m.com](http://www.3m.com)

## 6.2 Approved Adhesive

The following adhesive is approved for use in fabricating decompression panels using h-profiles and sandwich panels manufactured by The Gill Corporation.

### 6.2.1 Henkel Loctite® EA 9309.3 NA: two part epoxy adhesive

**Manufacturer:**

Henkel Corporation  
One Henkel Way  
Rocky Hill, Connecticut

Telephone: 800-562-8483 (US)  
800-263-5043 (Canada)

Website: [www.loctiteproducts.com](http://www.loctiteproducts.com)

**Note:** Only the edge fill and adhesive materials described in sections 6.1 and 6.2 are approved for use in fabricating replacement liner and decompression panels.

## 6.3 Cleaning Solvents – Surface Preparation and Clean Up

The following solvents are recommended for cleaning surfaces in preparation for bonding and general cleanup:

- Acetone (propanone)
- Methyl Ethyl Ketone (MEK, 2-butanone)
- Ethanol (ethyl-alcohol)
- Isopropanol (isopropyl alcohol)

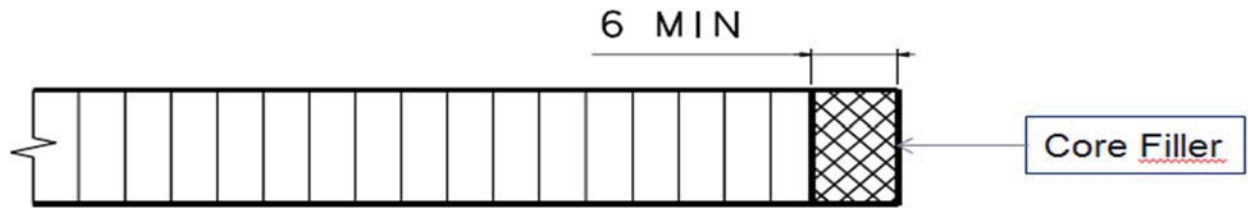
The use of chlorinated solvents is not recommended because of their toxicity, nor the use of any solvent which can leave behind a residue. The presence of grease, fingerprints, oil, water, or particulate matter can adversely affect adhesive properties and resulting bond strengths. All bonding surfaces must be free of cleaners – if there is any question of dryness or possibility of a residue, wipe the surface with a clean, dry, lint-free cloth.

## 7 Drawings of Types of Cargo Liner and Decompression Panel Fabrication

The following drawings illustrate the various types of panel preparation used in the fabrication of cargo liner and decompression panels. Only the edge fill and adhesive materials described in sections 6.1 and 6.2 are approved for use in fabricating replacement liner and decompression panels.

**Note:** All dimensions, standard parts, and attached parts are defined in the Airbus documentation (valid drawings according to the applicable CMMM, etc.)

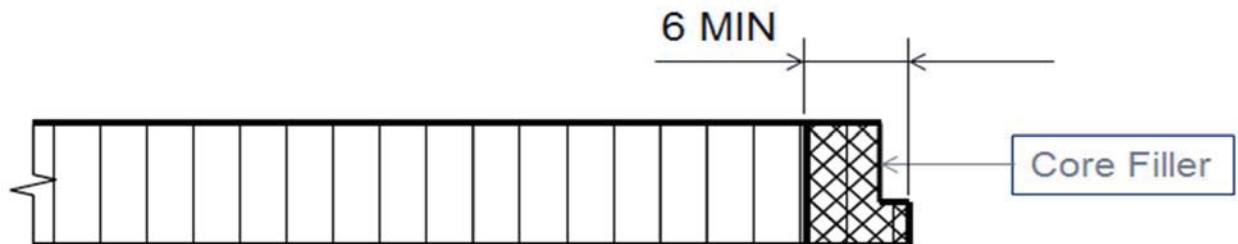
### 7.1 Panel Edge with Core Filler



#### Qualified Core Filler Specification

- Mankiewicz Alexit 495-14 FST
- 3M Scotch-Weld EC3524B/A

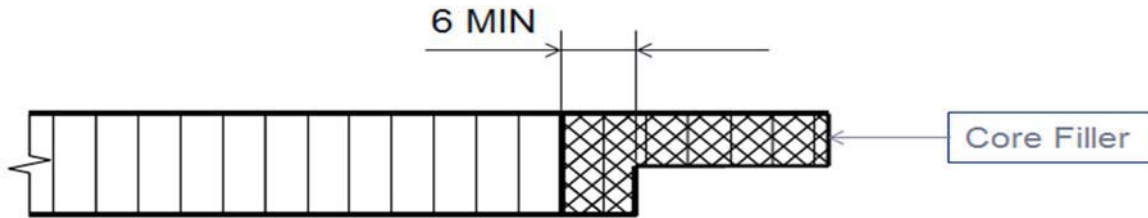
### 7.2 Milled Panel Edge with Core Filler – Typical for Fire Protection Strip



#### Qualified Core Filler Specification

- Mankiewicz Alexit 495-14 FST
- 3M Scotch-Weld EC3524B/A

### 7.3 Other Milled Panel Edge with Core Filler – Typical for Rapid Decompression Feature

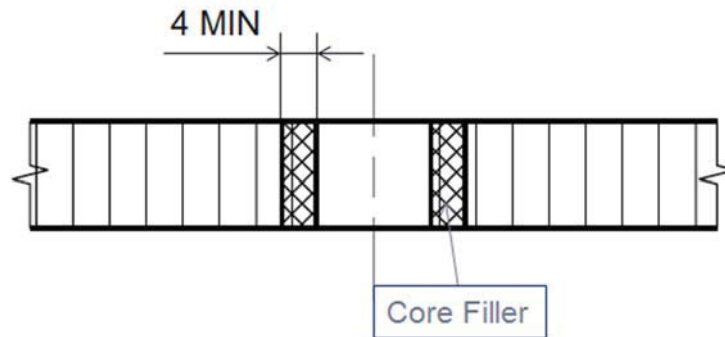


#### Qualified Core Filler Specification

- Mankiewicz Alexit 495-14 FST – All applications
- 3M Scotch-Weld EC3524B/A – See caution

**Caution:** 3M Scotch-Weld EC3524B/A is not permitted for ceiling area decompression panels.

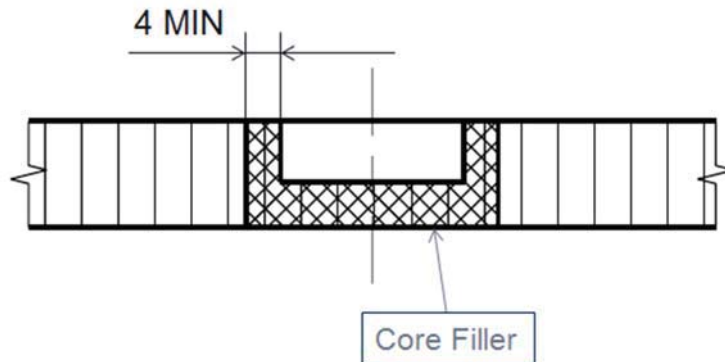
### 7.4 Hole with Core Filler



#### Qualified Core Filler Specification

- Mankiewicz Alexit 495-14 FST
- 3M Scotch-Weld EC3524B/A

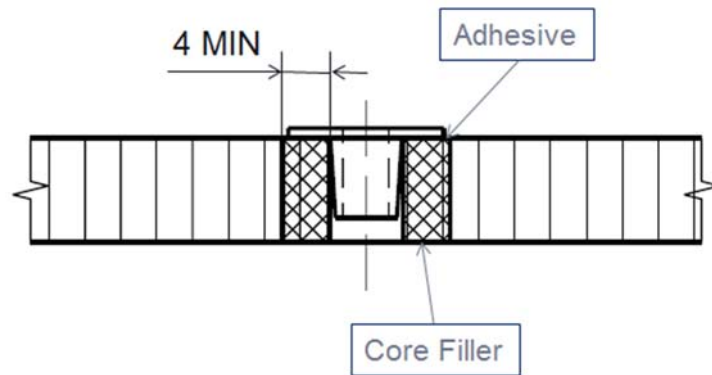
### 7.5 Blind Hole with Core Filler



#### Qualified Core Filler Specification

- Mankiewicz Alexit 495-14 FST
- 3M Scotch-Weld EC3524B/A

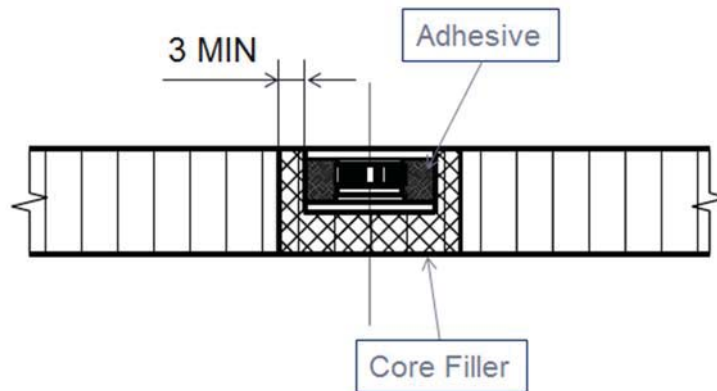
### 7.6 Shouldered Insert with Core Filler



#### Qualified Core Filler Specification

- Mankiewicz Alexit 495-14 FST
- 3M Scotch-Weld EC3524B/A

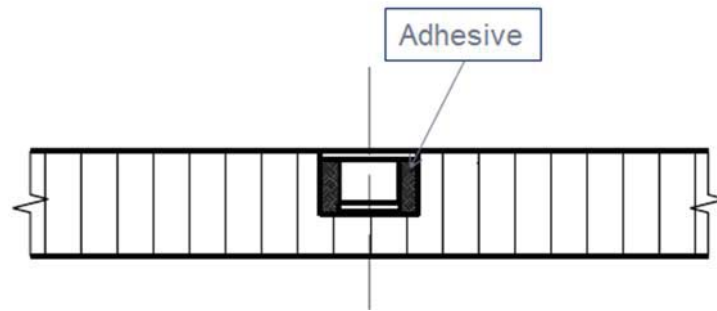
### 7.7 Blind Insert with Core Filler



#### Qualified Core Filler Specification

- Mankiewicz Alexit 495-14 FST
- 3M Scotch-Weld EC3524B/A

### 7.8 Blind Insert without Core Filler

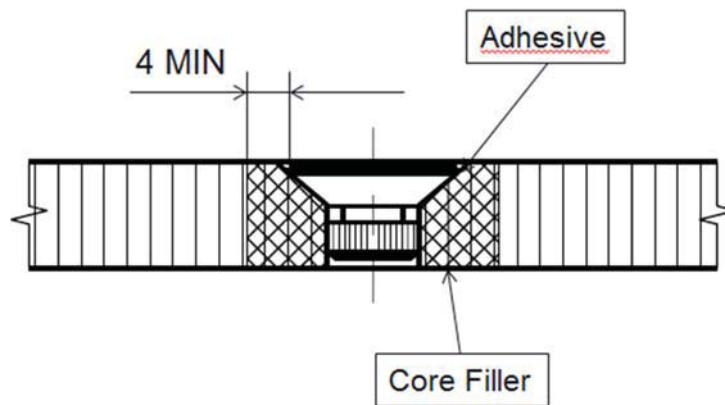


#### **Qualified Core Filler Specification**

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- Mankiewicz Alexit 495-14 FST
- 3M Scotch-Weld EC3524B/A

### 7.9 Countersunk Insert with Core Filler



#### **Qualified Core Filler Specification**

---

- Mankiewicz Alexit 495-14 FST
- 3M Scotch-Weld EC3524B/A

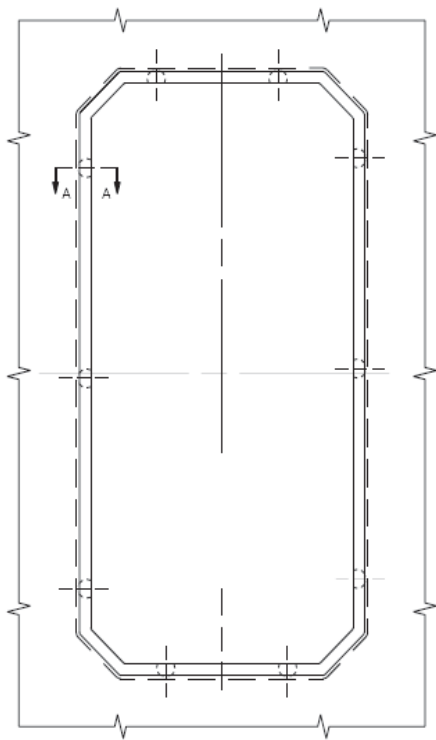
### 7.10 Decompression Panel - Integrated Prepreg Plugs

In the area of the decompression catches, plugs are installed in the OEM Panel to avoid debonding of the rear side prepreg layer if the decompression components are installed.

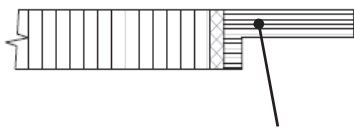
Because the peel values of semi-finished material are much higher and the back side layers are stiffer than the OEM material, a Core Filler Contour without any plugs is sufficient for cargo lining panels made from semi-finished material – see drawings below.

#### OEM Cargo Lining Panel

with Prepreg Plug design feature



SECTION A-A

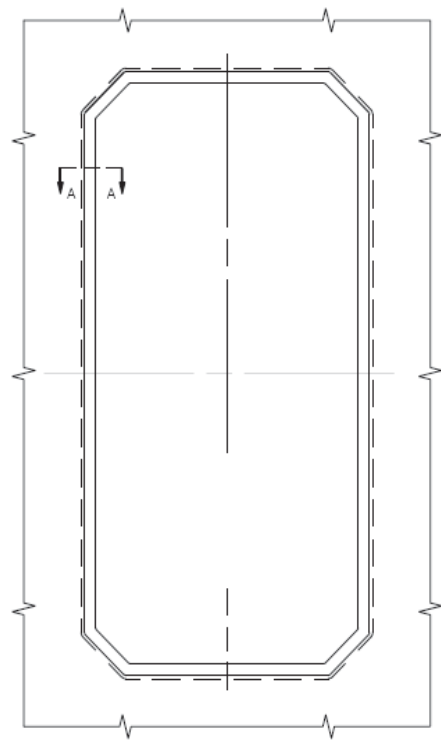


Plug installed  
(schematic view)

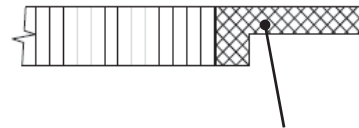
Typical Decompression Panel with  
Prepreg Plug design feature

#### Semi-Finished Material Panel

with Core Filler design feature

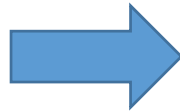


SECTION A-A



Core Filler installed  
(schematic view)

Typical Decompression Panel with  
Core Filler design feature



**Qualified Core Filler Specification**

---

- Mankiewicz Alexit 495-14 FST – All applications
- 3M Scotch-Weld EC3524B/A – See caution

**Caution:** 3M Scotch-Weld EC3524B/A is not permitted for ceiling area decompression panels.



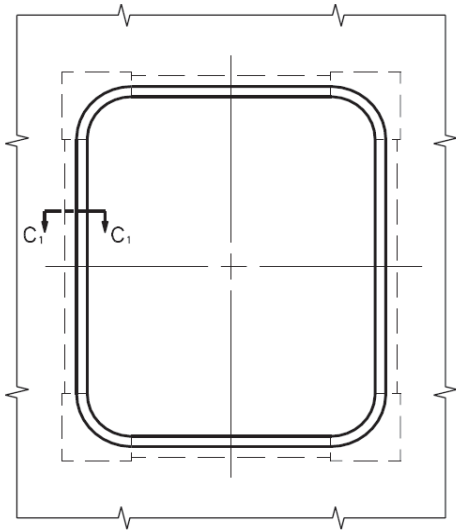
### 7.11 Decompression Panel - Integrated Metal Sheet

Aluminum inlays are integrated in the specific OEM panels for a dedicated release application.

Because the peel values of semi-finished material are higher and the back side layers are stiffer than the OEM material, no aluminum inlays are necessary for cargo lining panels made from semi-finished material.

#### OEM Cargo Lining Panel

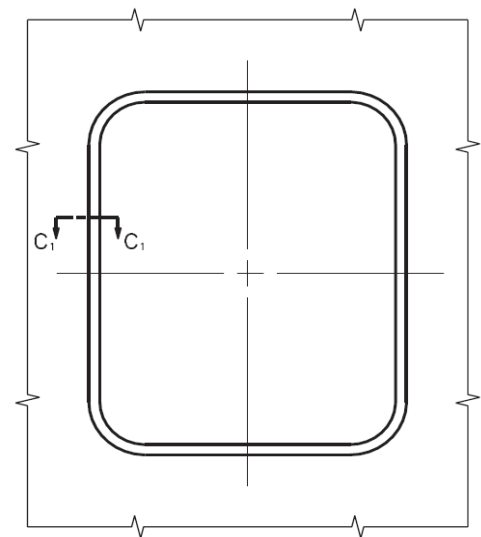
Re-Enforcement Installation



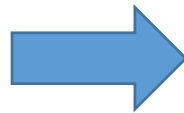
SECTION C<sub>1</sub>-C<sub>1</sub>

#### Cargo Lining Panel made from Semi-Finished Material

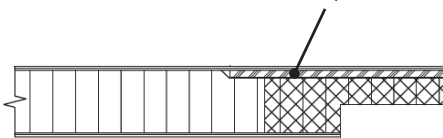
No Re-Enforcement Installation Necessary



SECTION C<sub>2</sub>-C<sub>2</sub>

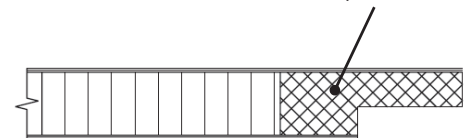


Reinforcement installed  
(schematic view)



Typical Decompression Panel with Al-Sheet

Core Filler installed  
(schematic view)



Typical Decompression Panel without Al-Sheet

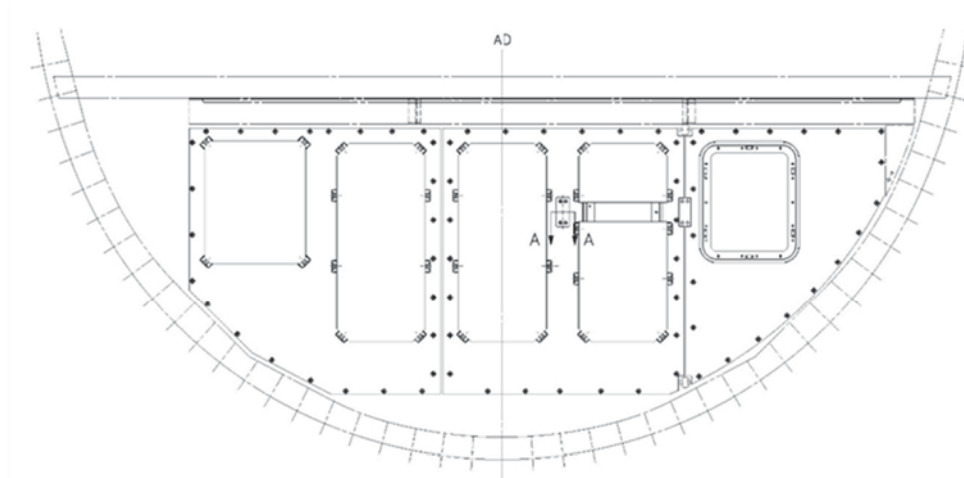
#### Qualified Core Filler Specification

- Mankiewicz Alexit 495-14 FST – All applications
- 3M Scotch-Weld EC3524B/A – See caution

**Caution:** 3M Scotch-Weld EC3524B/A is not permitted for ceiling area decompression panels.

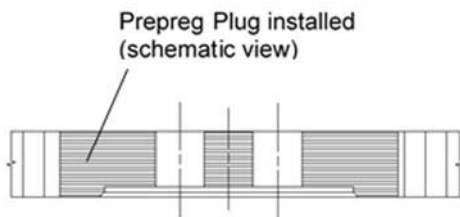
## 7.12 Partition FR24A – AD-Design

This variant of the A320 partition panel FR24A has a bumper feature not otherwise defined in this AIM. In order to replace the composite plug feature from drawing D255 70449 E1-E1 in a semi-finished material to work with this bumper, core filler must be used within the area as described below.



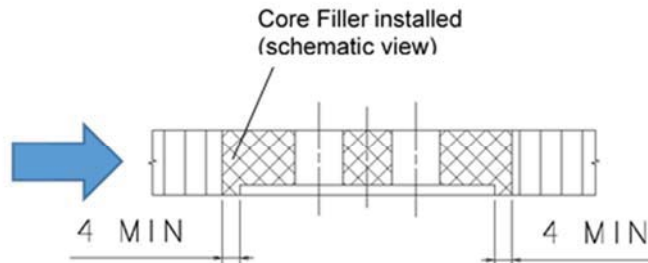
Typical Partition Wall FR24A – S-Glass

SECTION A-A  
(OEM Cargo Lining Panel)



Typical interface support with prepreg  
plug design feature

SECTION A-A  
(Semi-Finished Material Panel)



Typical interface support with core filler  
design feature

To create the semi-finished panel as shown on the right, either procedure described below can be used.

### 7.12.1 Procedure A:

1. Remove the top faceskin in the bumper area plus 4mm minimum around it on all sides.

2. Make a 3mm deep cut-out over the entire area of the bumper.
3. Add edge filler into the core cells where the faceskin has been removed, being sure that each cell is filled and that the 3mm rebate remains.
4. Cure edge fill as required (see Section 8).
5. Drill holes in the size and location shown in the Airbus drawing (see Section 5).
6. Ensure that the bumper will be flush to the panel surface, and the holes align, when installed on the airplane.

#### 7.12.2 Procedure B:

1. Remove the top faceskin and all honeycomb core in the bumper area plus 4mm minimum around it on all sides (see Section 10.4, photos 1 and 2, without the undercut).
2. Add edge filler into the entire bumper area where the faceskin and core has been removed (see Section 10.4, photo 3).
3. Cure edge fill as required (see Section 8).
4. Create a 3mm deep cut-out over the bumper area (see Section 10.4, photo 4).
5. Drill holes in the size and location shown in the Airbus drawing (see Section 5).
6. Ensure that the bumper will be flush to the panel surface, and the holes align, when installed on the airplane.

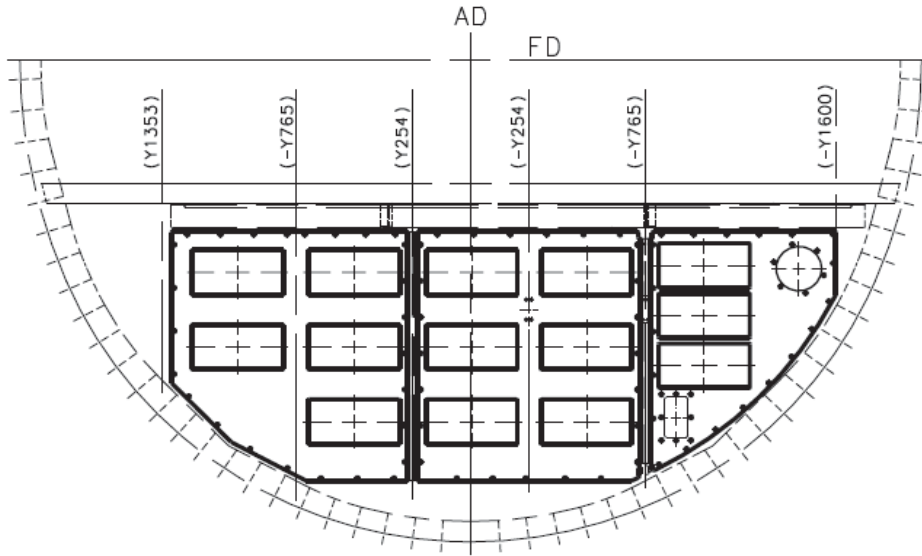
#### **Qualified Core Filler Specification**

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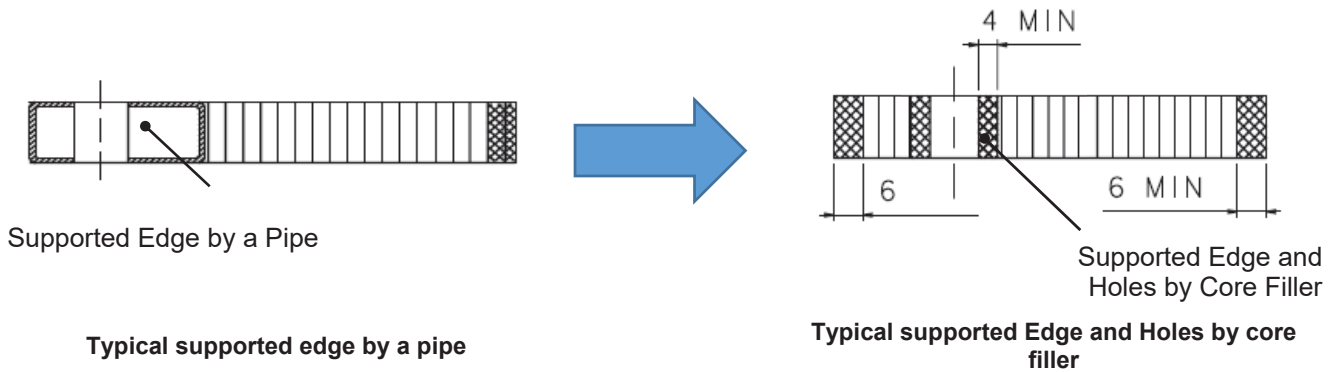
- Mankiewicz Alexit 495-14 FST
- 3M Scotch-Weld EC3524B/A

### 7.13 Partition FR24A – AF-Design

The first variants of the A320 partition panel FR24A have aluminum pipes as edge protection. In order to produce this generation of partition panel from semi-finished material, core filler must be used as edge protection. The inserts integrated in the tubes can be replaced by inserts bonded in the honey comb structure.



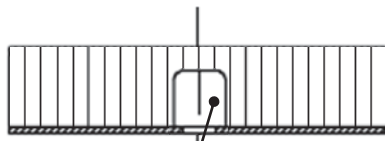
Partition Wall FR24A – E-Glass



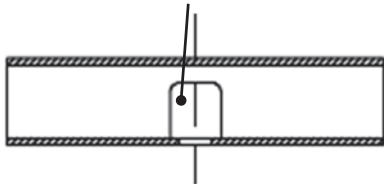
#### Qualified Core Filler Specification

- Mankiewicz Alexit 495-14 FST
- 3M Scotch-Weld EC3524B/A

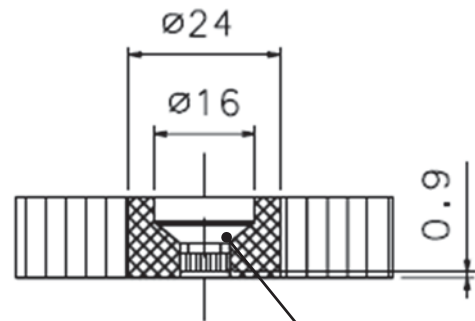
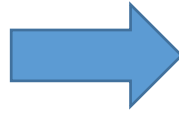
### 7.13.1 Alternative Insert Installation



Inserts for Protection Panel Attachment are integrated in the Al-Pipes / Al-sheets



Typical insert integration in Al-Pipes / AL-sheets



Alternative Insert Installation

Typical alternative Insert installation with core filler

#### Procedure:

- Remove the rear face sheet  $d=24$  mm/ 0,98 inch from the core
- Fill the area with core filler permitted according to Airline Instruction Manual
- Hardening process according to product data sheet
- Provide the hole for the insert
- Use insert according to DAN401-08
- Use epoxy adhesive according to Airbus CML 05EML7
- Install insert – curing process according to product data sheet

**Note:** Cleaning and degreasing requirements must be considered.

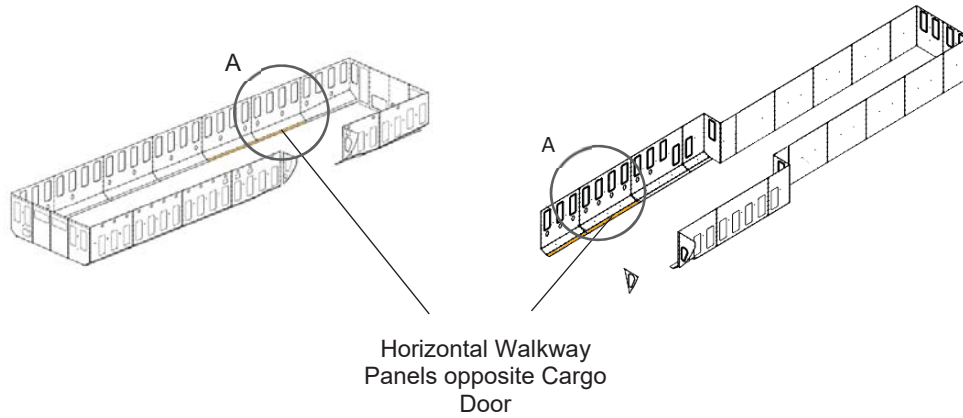
Core filler can be used as edge protection to avoid the ingress of fluids as well as the penetration of fire. The mechanical properties of the sandwich material are not impacted.

#### Qualified Core Filler Specification

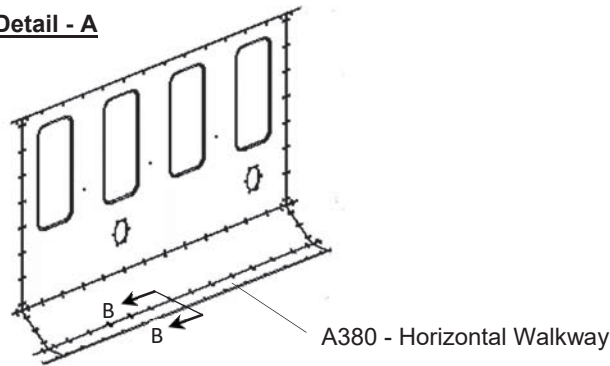
- Mankiewicz Alexit 495-14 FST
- 3M Scotch-Weld EC3524B/A

### 7.14 A380 Horizontal Walkway

For the section opposite the cargo door, use the materials and methods from section 7.1 and 7.4 to create the part as shown below.

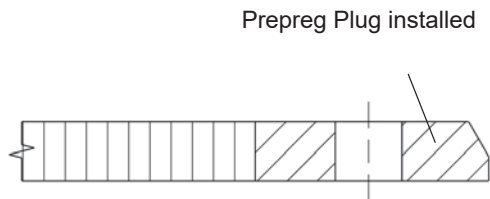


**Detail - A**



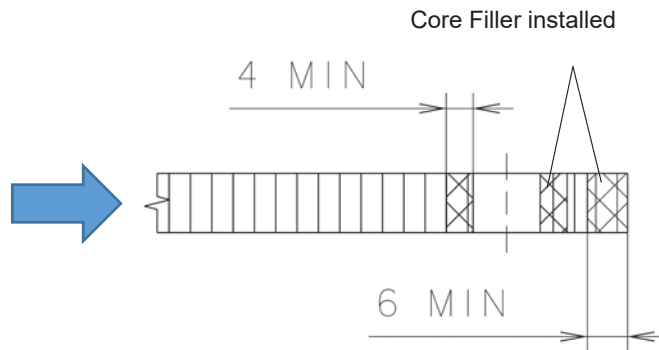
**A380 typical Horizontal Walkway in fwd and aft Cargo Hold opposite Cargo Door**

SECTION B-B  
(OEM Cargo Lining Panel)



Typical design with prepeg plug design feature

SECTION B-B  
(Semi-Finished Material Panel)



Typical design with core filler design feature

## 8 Edge Filling Procedure

All of the replacement cargo liner panels must be edge-filled with the compound described above in section 6.1. The edge filling provides protection and support of the panel edges, and also prevents moisture from entering into the honeycomb core. A broad range of epoxy materials is available, but only those which are approved and demonstrate high levels of fire resistance, moisture resistance, and strength retention can be used for sealing the liner edges.

For adequate adhesion and integration of the filling compound into the panel edges, **it is necessary to remove the honeycomb core to the extent of a minimum of 6 mm (approximately ¼ inch or 1½ cells)** to provide the necessary burn-through and moisture resistance. Refer to section 5 above for a satisfactory tool for removing the Nomex honeycomb core. Preferably a depth controlling tool is attached to the router assembly to obtain a uniform depth of cut. Care must be exercised to prevent cutting back or thinning of the panel facings. A vacuum probe or stream of clean dry air can be used to remove the dust and debris caused by the routing operation. The excess debris and loose material must be thoroughly removed from the routed area to optimize the bonding of the filler material to the panel edges.

The edge filling compounds are two-part systems which must be thoroughly mixed together according to the manufacturer's instructions. The adequately mixed edge filling material will appear uniform in color (i.e. no streaks or blotches in the mixture) and will have the consistency of a viscous putty which can be used to fill the panels without slumping or running out. A spatula or putty knife can be used to spread or trowel the material into the panel edge, taking care to fill the honeycomb channels as completely as possible (no core material may be visible). While still pliable, the excess filling can be removed by using the edge of the application tool, followed by smoothing the material flush with the panel edges. If the filling hardens before finishing the edges, a sander can be used to remove and smooth the excess. Edge filling must also be applied to the exposed edges of any cut-outs made in the interior area of the cargo liner panel.

The edge filling will cure at room temperatures in 24 hours, but a shorter cure can be obtained by heating at 70°C for 2 hours. Follow the manufacturer's instructions for reduced cure times.

The mixed edge filling compound has a working life of 1-1½ hours, and care must be taken to use the material before it begins to appreciably harden. Obtain and follow the precautions in the manufacturer's Material Safety Data Sheets for the epoxy edge fill material.

Material Safety Data Sheets for the edge filling materials can be obtained from the manufacturer's website or in English (US) from The Gill Corporation website.

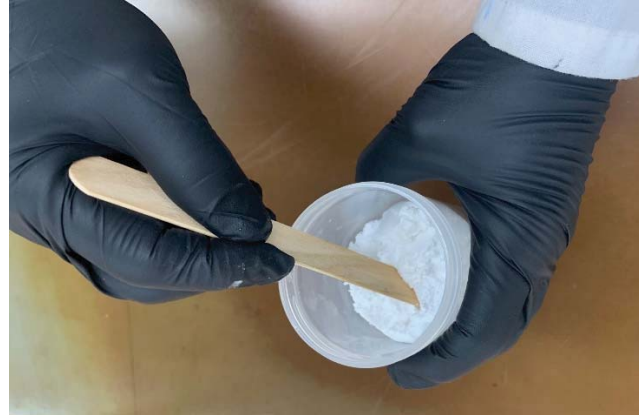
See illustrations in section 8.1, for procedure for installing the edge filling, and the reference figure below for a sketch of an edge filled panel.

### 8.1 Edge Filling Illustrated Procedure

1. To prepare the panel for edge filling, rout the edges of the panel to a depth of about 6 mm (1/4 inch or about 1½ honeycomb cells). Use a high speed rotary tool, and be careful not to remove any facing material – only the core.



2. Thoroughly mix the two-part edge filling material according to the manufacturer's instructions. The resulting mix should be uniform in color, and have the consistency of putty.



3. Apply the edge filling to the routed-out groove and around all edges of the panel. Smooth the filling with a trowel or spatula before it hardens. Mix only enough filling which can be used in 30 – 40 minutes.

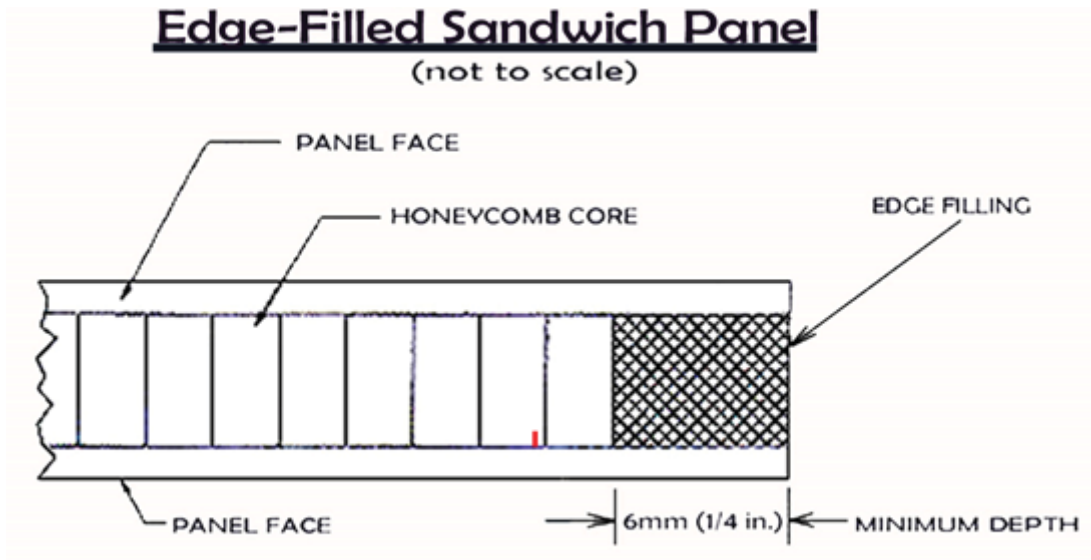


4. Edge filling should be smooth and flush with the edges of the panel.





## 8.2 Edge Filled Panel Figure



## 9 Decompression Panel Hardware for Cargo Hold – Lower Deck

This section describes the hardware of decompression panels for the lower cargo compartments of Airbus A300, A310, A300-600, A318, A319, A320, A321, A330, A340, A350 and A380 aircraft. The assemblies are constructed of cargo liner sandwich panels and are held in position by special latches or a combination of latches and molded h-profiles in certain aircraft.

Latch and h-profile applications are described in the valid drawings according to the CMMM.

Refer to the Airbus applicable cargo liner CMMM for cargo liner application and location, and the Illustrated Parts Catalog for parts details.

The decompression panel assemblies must provide the same containment properties as the cargo liners, and additionally, provide a means of pressure equalization between the cargo compartments and all other areas in the event of a rapid decompression event. As an integral component of the decompression system, the methods of attachment must allow rapid displacement of the decompression panel to provide pressure compensation and avoid possible structural damage. Procedures and/or materials allowed in the Airbus CMMM are valid for The Gill Corporation products referenced in this manual.

## 10 Fabrication of Decompression Panels for New Generation Airbus Aircraft

The decompression panels in the long range, widebody aircraft and A318/A319/A320/A321/A380 enhanced are secured to the cargo liner panels by means of latches mounted around the edges of a panel and frame assembly. The edges of both the decompression and cargo liner panels must be reinforced with edge filler and machined to final dimensions before mounting the hardware and installing the panel.

The following sections describe a procedure for fabrication and preparation of the panels for installation.

**Note:** In addition to the applicable drawings, damaged panels can be used as templates for dimensions. Any undamaged hardware can also be reused on the replacement panel.

### 10.1 Panel Preparation

Identify the panel type and location of damaged panels and remove them. Remove all hardware and save anything which can be reused. Cut panel stock to the approximate size of the damaged panel. See section 10.3 for examples and diagrams for repairing various types of damage, and section 10.4 for illustrations for preparing decompression features.

### 10.2 Repair Procedures

The latest issue of the Airbus CMMM must be followed for the repair of cargo liners and decompression panels.

### 10.3 Method for the Fabrication of Decompression and Cargo Liner Panel Edges – Drawing

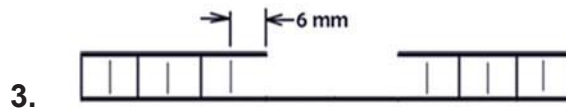
The following shows a procedure for edge preparation with core filler. This can then be cut down the middle of the filler to yield two panels with core filler. This is useful for typical cut outs such as those used for fire protection strips, decompression features, or maintenance covers.



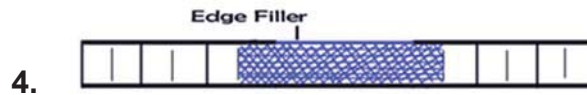
Sandwich Panel – Identify by location and type.



Machined channel in panel – do not damage the bottom facing; use a CNC router if available.



Machined channel and undercut core; core should be undercut by at least 6 mm, taking care not to damage top or bottom facings.



Channel and undercut area filled with approved filler material. The edge filler must be cured or hardened before any further machining.

**Caution:** 3M Scotch-Weld EC3524B/A is not permitted for ceiling area decompression panels.



Edge filled channel machined to the specified depth (according to the applicable Airbus Drawings).

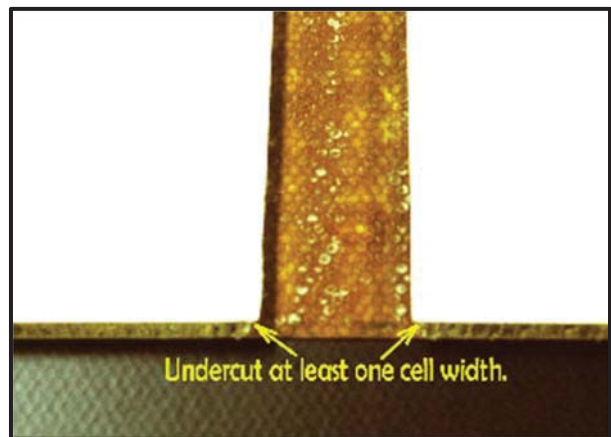
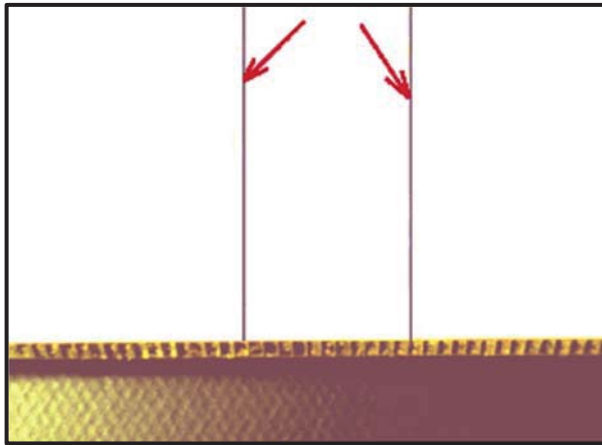


Machined and cut panel edge; if this procedure is used, 2 panel edges can be fabricated, and will be mirror images of each other.

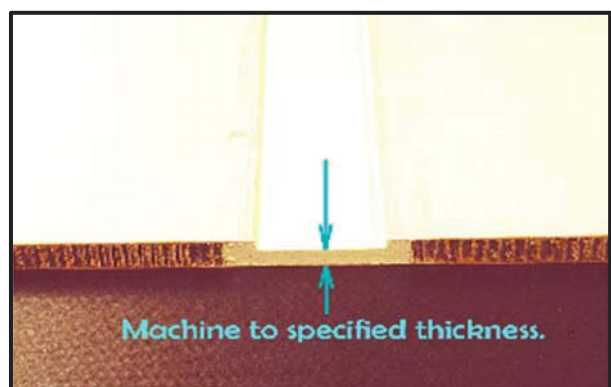
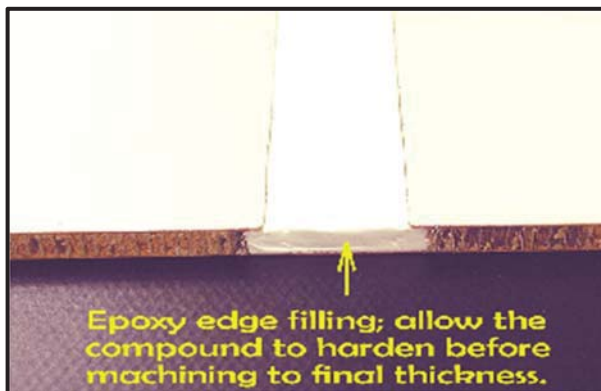
## 10.4 Method for the Fabrication of Decompression and Cargo Liner Panel Edges – Pictures

The following shows pictures of the same process described above.

1. Carefully mark panel top facing as a guide for routing the facing and core.
2. Rout the facing and core material. Undercut the core at least one cell. Be very careful not to cut into the back facing.

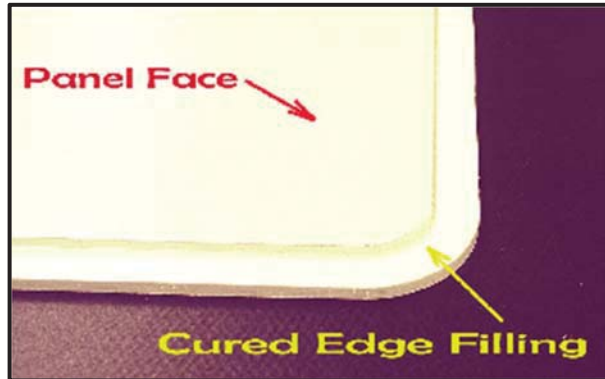


3. Fill in the routed area with the edge fill compound. Make sure that the filling completely fills the undercut area. This will help support the panel edge.
4. Machine the edge filled channel to the correct thickness for the panel type and location. CNC equipment is highly recommended for this step



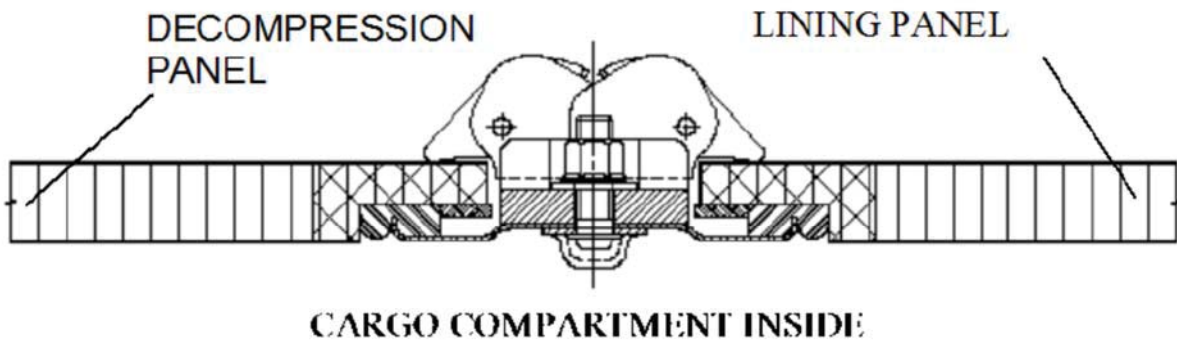
5. Trim the panel to size, following the applicable drawing or by using the damaged panel as a template. Be careful not to break or damage the edges.

6. This is a cross-section of the panel edge. The panel is now ready for installation of mounting hardware. Follow the applicable drawing or use the removed panel as reference for the hole and hardware locations.



#### 10.5 New Generation Rapid Decompression Panel Detail

The drawing below shows a typical, new generation rapid decompression panel installation.



Typical Decompression Panel

## 10.6 Fabrication of Cargo Liner Panel Holes with Filler/Inserts

The following illustrations show methods for repairing cargo liner or decompression panels with through-holes, blind holes, or inserts.

**Note:** The illustrations show preparation of floor panels, but the same techniques can be used for fabrication of liner or decompression panels.

Mark the panel at locations specified in the applicable Airbus drawing (CMMM). This is very important to produce an acceptable replacement panel. For preparation of through-holes, carefully drill through the panel using a drill bit of the specified diameter. For blind holes, it is recommended to use a router bit to avoid damaging the bottom facing. A handheld, high-speed rotary tool can be used, but it is recommended to use a CNC or an appropriate drill press and bit that is adjusted to the correct depth to obtain uniform holes without damaging the bottom facing. In most cases, it is necessary to undercut the core around the inside of the hole and insert edge filling material.

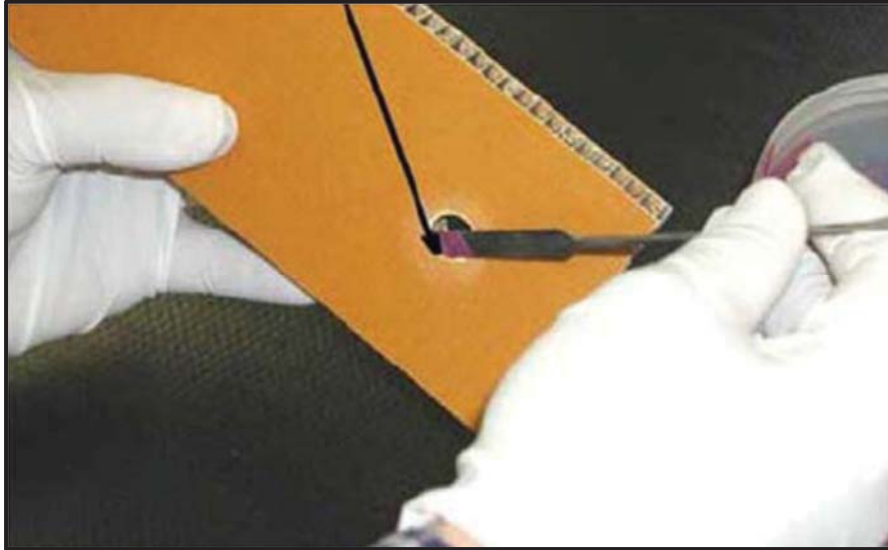
### 10.6.1 Undercutting the Core

When specified, the core in the hole must be undercut to at least 6 mm. It is recommended to use a CNC, however, a handheld, high-speed rotary tool can be used. Make sure there is sufficient space to insert enough filler material.



### 10.6.2 Application of the Filler Material

Use a spatula to apply the filler material. Force the fill into the undercut core area, but try to avoid blocking the open area of the hole (additional routing may need to be done after adding the fill if it blocks the opening). Allow the filler to harden completely before doing any further fabrication. Be sure to wipe any excess filler or adhesive from the surface before it hardens.



### 10.6.3 Flanged Insert Installation

If a flanged or surface mounted insert is to be installed, lightly sand the surface around the hole to ensure adequate adhesion of the flange to the facing.



**Note:** If additional adhesive is used for the installation of inserts, make sure that the filler is hardened and machined to the shape and dimensions specified in the applicable Airbus documentation (CMMM).

## 11 Fabrication of Decompression Panels for A300, A310, A300-600, and A319/A320/A321

### 11.1 h-profile Assemblies

Decompression panels in A300, A310, A300-600, and older A319/A320/A321 aircraft utilize an h-profile bonded to the edges of the panel as part of the panel release system during a decompression event. For the single-aisle aircraft use the latch shown in the CMMM, and follow this process for assembly of the h-profile.

The Airbus CMMM is the governing documentation, and must be consulted in the event of conflict in the parts or panel configuration

**Note:** Latches and other undamaged hardware can be re-used in new assemblies.

#### 11.1.1 Panel Preparation

Identify the type and location of all damaged decompression panels and remove them from the aircraft. Refer to section 3.3 for specific aircraft application for panels on h-profiles and parts lists. Remove all attachment hardware and latches. See 11.2 for illustrations of the various steps in fabricating decompression panels. Use the removed, damaged panel as a template, or refer to the applicable Airbus drawing, and cut panel stock to the approximate dimensions, see section 5 for recommended machining procedures. A router is recommended for final sizing.

**Note:** All replacement edges must be edge-filled. See section 8.1 for edge filling procedure. After the edge filling has cured, the edges can be smoothed to finished size using emery cloth, grit 80-120.

**Attention:** Use only edge fill materials specified in section 6.1 unless another material is specifically approved by Airbus.

#### 11.1.2 h-profile Preparation

Cut all h-profile segments to the required, finished lengths. The corners must be miter-cut to form the end joints. See steps 1-4 in section 11.2. Smooth and deburr all edges of the h-profiles using 80-120 grit emery cloth. Assemble the h-profiles to the panel to check for fit and alignment before proceeding to the bonding step.

All bonding surfaces must be cleaned using a lint-free cloth and approved cleaning solvent listed in section 6.3.

#### 11.1.3 Adding Adhesive to the h-Profile

1. Mix the two-part adhesive according to the manufacturer's instructions. See section 11.2 steps 5-8.
2. Apply adhesive to the inside of the channel of the h-profile, to the mating surface of the panel, and to the edge of the panel.
3. Firmly press into place each h-profile section, carefully checking alignment and joints. Clamps may be used to hold the h-profiles in place, but extreme care must be taken not to damage the profile edges.
4. Remove excess adhesive using a lint-free cloth and approved solvent. See section 6.3 for approved solvents.



5. Fill in the slot between the h-profile mating joints with adhesive, and smooth flush with the h-profile surfaces. See section 11.2 steps 9-12.
6. Allow the adhesive to fully cure.
7. Bevel the h-profile corners as shown in section 11.2, step 11.
8. Use the existing panel or drawing as a template, mark the positions where holes will be machined. Drill holes using a drill bit recommended in section 5.1
9. Remove any frayed fibers with 80-120 grit emery cloth. Check to make certain that drilling did not cause delamination or tearing of the panel.
10. Clean the inside of the h-profile with a lint-free cloth and approved solvent (see section 6.3), in preparation for application of the foam tape.
11. Remove protective covering from foam tape and press firmly into place along the inner surface, section 11.2 step 16.
12. Check to make certain panel assembly fits into the applicable opening in the cargo liner wall or ceiling.
13. Assemble all attachment items and latches and apply an approved adhesive tape over all corner slots. See section 11.2 step 15 and section 11.3.
14. Install the assembled decompression panel into the opening.

**Note:** The Airbus CMMM for the applicable aircraft is the controlling specification, procedure, and material approval document, and must be carefully followed.

#### 11.1.4 h-Profile Installation – Adhesive

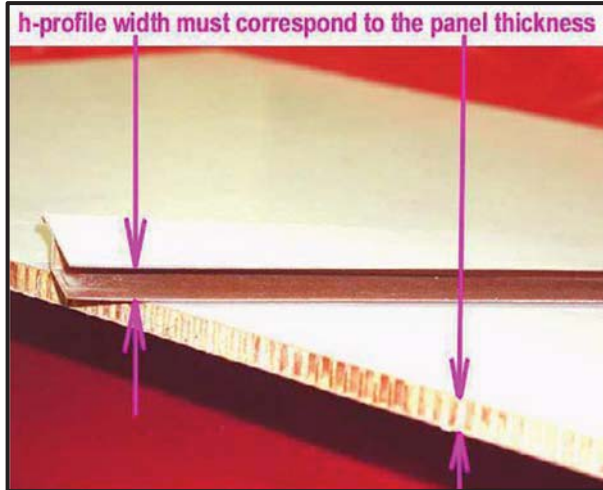
The adhesive used for bonding h-profiles to the decompression (sandwich) panel is a two-part epoxy system, Loctite Hysol EA 9309.3 NA (see section 6.2 for more details)

The two adhesive components must be mixed in a ratio of 100:22 Part A:Part B, by weight thorough mixing is necessary. The quantity of adhesive mixed should not exceed that which will be used in approximately 35 minutes, but in no case should exceed 450 grams (approximately 1 lb), because the curing reaction begins at room temperature and the resin advancement occurs when the two components are mixed. The resulting increase in viscosity can cause difficulty wetting the surfaces to be bonded and obtaining proper film thickness, leading to weak bonds and reduced panel integrity. At room temperature, the adhesive should be allowed to cure for approximately 12 hours before handling the bonded parts. However, full adhesive strength is achieved only after 3-5 days. Elevated temperatures can accelerate the curing rate. For example, normal adhesive performance can be achieved after 2 hours at 140°F. Oven curing of large parts, such as floor panels, is not feasible, the use of a heat gun to apply heat to a localized area is a common practice to hasten the development of full bond strength. Care must be taken in the application of heat, and the manufacturer of the adhesive must be contacted for specific recommendations concerning curing times and temperatures.

**Attention:** Use only the adhesive described above unless an alternate material is specifically approved by Airbus Product Support/Technical Authority.

## 11.2 Illustrations of h-Profile/Panel Fabrication

1. Make sure that the h-profile and panel are compatible; check that the panel fits into the h-profile groove without excessive force or strain. See section 3.3 for the compatible panel and h-profile combinations.



2. Measure the length of h-profile needed, and cut ends at 45° angle. Place a block of scrap material into the h-profile for support while the h-profile is being cut. Use a diamond grit blade for the best results and longest life.

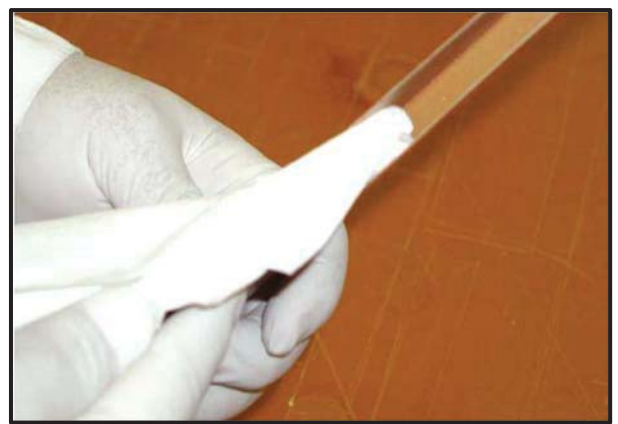
**Note:** Saw guard is shown in raised position for illustration purposes – always keep guard in place when cutting.



3. Wipe the edges of the edge-filled panel with a recommended solvent. Make sure the edges are completely dry before applying adhesive for bonding the h-profile. Clean, dry surfaces are required to ensure strong uniform bonds.



4. Also, clean the inside legs of the h-profile with a solvent, and let dry. Be careful not to crack or break the legs during cleaning or handling the h-profile.



5. Mix the two-part epoxy adhesive according to the manufacturer's instructions. The adhesive must be uniform in color, containing no streaks. For ease of mixing and application, two-component cartridge kits may be available from the manufacturer.



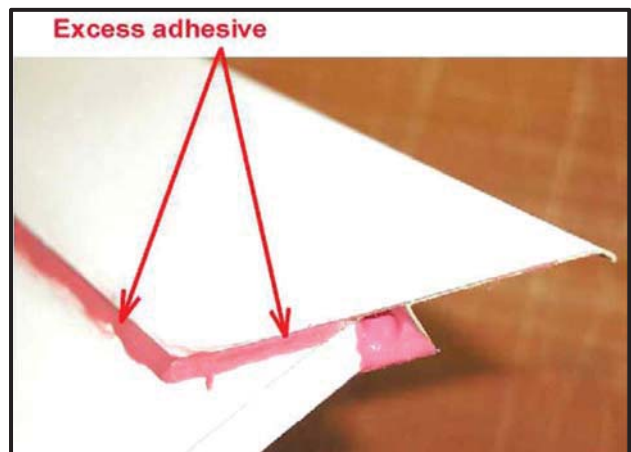
6. Use a spatula or wooden applicator to apply adhesive to the inside of the legs of the h-profile. Be sure to wear protective gloves to prevent skin contact with the adhesive.



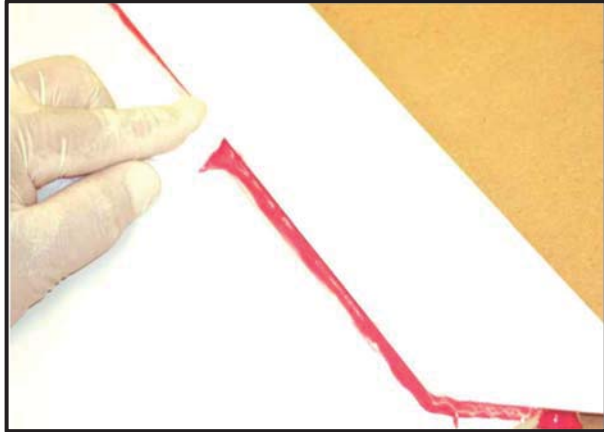
7. Apply a generous amount of adhesive to the inside surfaces of the legs of the h-profile. This is important to maintain an air-tight seal after the panel and profile are mated.



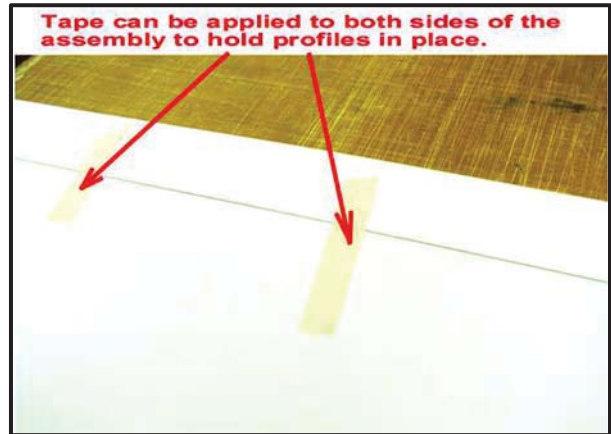
8. Fit the h-profile to the panel – adhesive should squeeze out from underneath the legs to indicate a sufficient amount of adhesive was used. Align the profiles while the adhesive is still pliable.



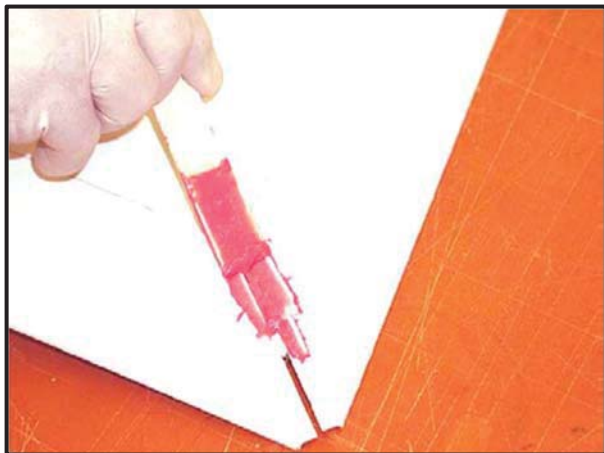
9. Wipe off excess adhesive before it hardens.



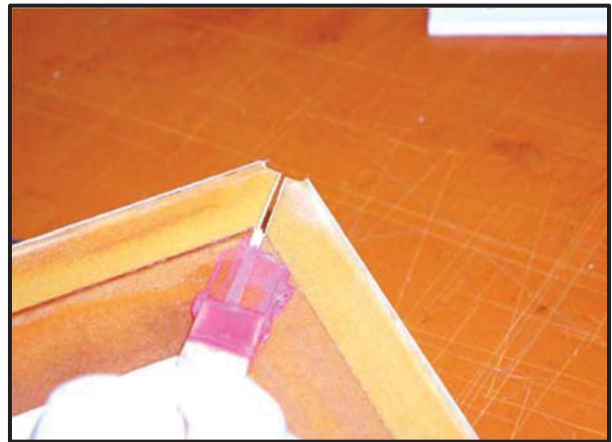
10. Masking tape can be used to hold the profiles in position while the adhesive cures and during the following adhesive applications.



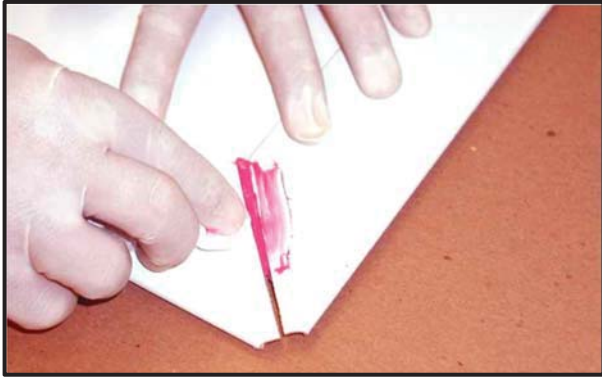
11. Apply adhesive to the grooves between the ends of the h-profiles. Fill in the grooves on both sides of the assembly.



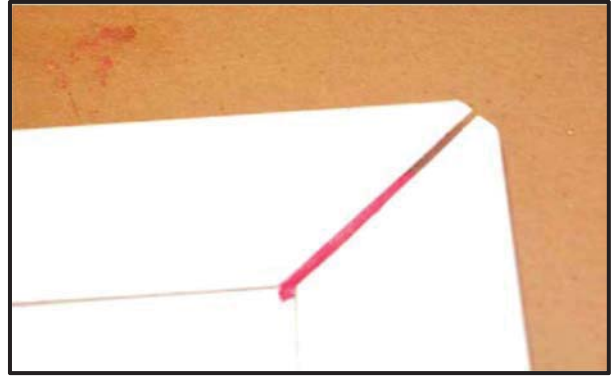
12. Apply adhesive to the back of the h-profile/panel assembly.



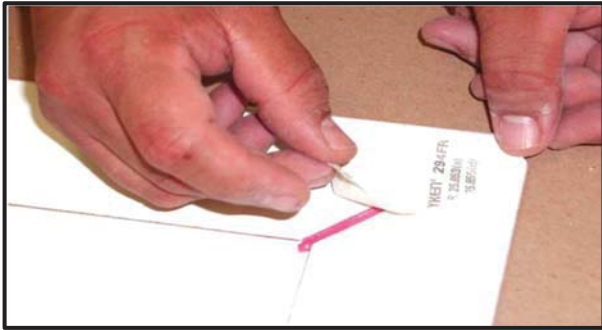
13. Remove excess adhesive from corner areas on both sides.



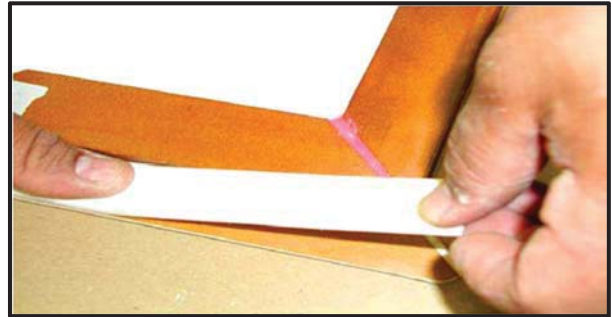
14. The corner of the h-profile assembly should look like this before the application of tape.



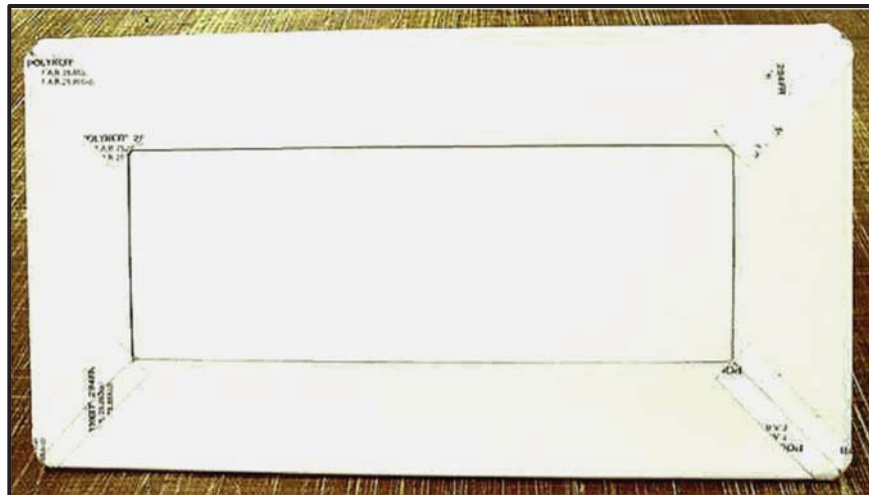
15. Apply ABS5649A12 (formerly DAN 328H12) or tape allowed per Airbus AMM over the grooves in each corner. Allow the adhesive to cure thoroughly before installing the hardware.



16. Apply foam tape to the back of the h-profile. This will provide an airtight seal when the decompression panel is installed. The panel is now ready for the installation of the mounting hardware.



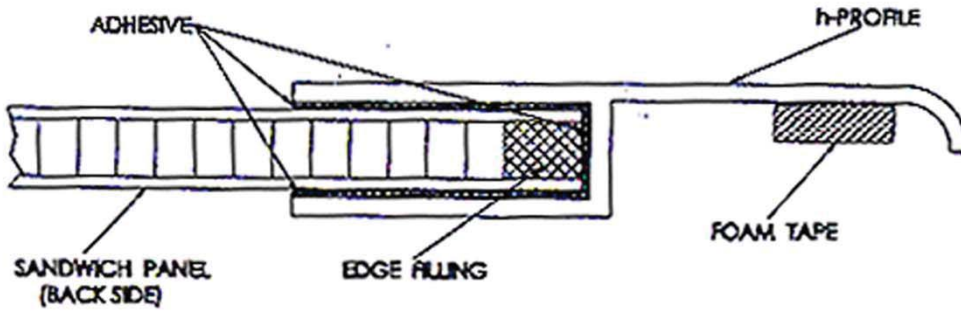
17. Decompression panel before installation of mounting hardware.



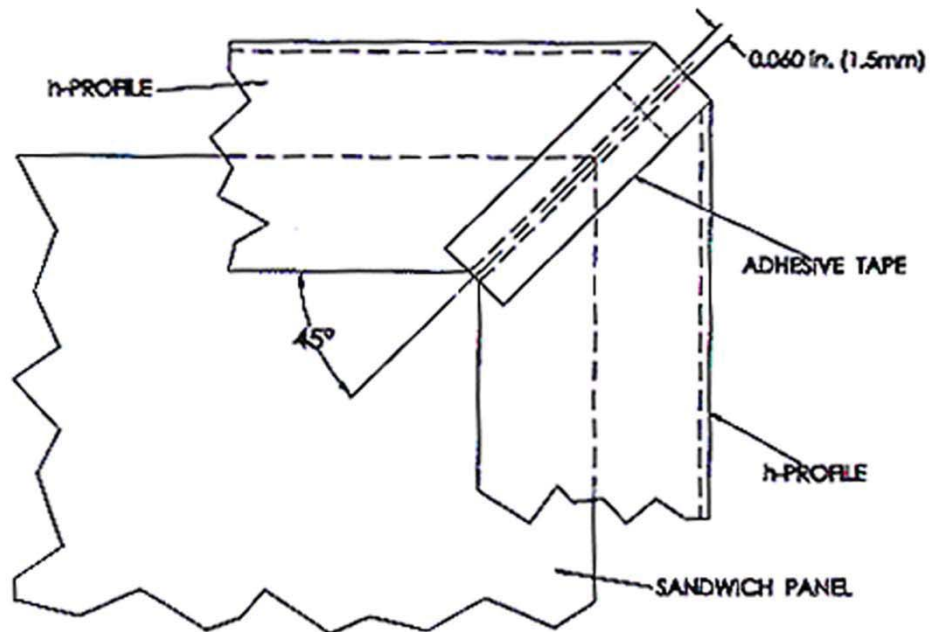
11.3 Drawings of the h-profile Assembly

**h-PROFILE JOINT (CORNER) CONFIGURATION**  
(not to scale)

**A** h-PROFILE CROSS SECTION



**B** h-PROFILE / PANEL CORNER ASSEMBLY  
(TYPICAL FOR ALL 4 CORNERS)



## 12 A380 Horizontal Walkway Paint

4522 panels used in the A380 horizontal walkway require the application of non-skid paint prior to installation to meet the requirements of FAR/ CS/ JAR 25.793. Details for selection and application of the paint are defined in A380 CMMM 50-10-01.

4522 panels are a slightly unbalanced construction and should be installed with the marked face side “up”; be sure to apply paint to the proper face side of the panel.

## 13 Appendix

### 13.1 Technical and Safety Data Sheets

Technical and safety data sheets are available from The Gill Corporation website for the following materials:

Alexit FST 495-14 Technical Data Sheet

Alexit FST 495-14 Safety Data Sheet

3M™ Scotch-Weld™ 3524B/A Technical Data Sheet

3M™ Scotch-Weld™ 3524B/A Safety Data Sheet

Hysol® EA 9309.3NA Technical Data Sheet

Hysol® Loctite® EA 9309.3NA AERO Part A

Hysol® Loctite® EA 9309.3NA AERO Part B

Gillpatch® III 6306 Technical Data Sheet

Gillpatch® III 6306 Safety Data Sheet

Installation of Gillpatch® III 6306



## 13.2 List of Abbreviations (From Airbus PTS 2550 M1M 0008 00, ISS. 4)

<b>Abbreviation</b>	<b>Definition</b>
<b>A/C</b>	<b>Aircraft</b>
<b>ABD</b>	<b>Airbus Directives and Procedures</b>
<b>AIM</b>	<b>Airline Instruction Manual (for the installation of cargo liner in Airbus Aircraft)</b>
<b>AITM</b>	<b>Airbus Industrie Test Method</b>
<b>AITS</b>	<b>Airbus Industrie Technical Specification</b>
<b>AMM</b>	<b>Airbus Maintenance Manual</b>
<b>ASTM</b>	<b>American Society for Testing and Materials</b>
<b>BSF</b>	<b>Beschaffungs Sicherungs Forderung (Procurement Quality Assurance Requirements)</b>
<b>CML</b>	<b>Consumable Material List</b>
<b>CMMM</b>	<b>Component Maintenance Manual Manufacturer</b>
<b>CS</b>	<b>Certification Specifications</b>
<b>DDP</b>	<b>Declaration of Design and Performance</b>
<b>DOA</b>	<b>Design Organization Approval</b>
<b>EASA</b>	<b>European Aviation Safety Agency</b>
<b>FAR</b>	<b>Federal Aviation Regulations</b>
<b>FWD</b>	<b>Forward</b>
<b>ISO</b>	<b>International Standards Organization</b>
<b>JAR</b>	<b>Joint Airworthiness Requirements</b>
<b>LR</b>	<b>Long Range</b>
<b>MSDS</b>	<b>Material Safety Data Sheet (SDS)</b>
<b>N/A</b>	<b>Not Applicable</b>
<b>PTS</b>	<b>Purchaser Technical Specification</b>
<b>QM</b>	<b>Quality Management</b>
<b>QTP</b>	<b>Qualification Test Procedure</b>
<b>QTR</b>	<b>Qualification Test Report</b>
<b>RTCA</b>	<b>Radio Technical Commission of America</b>
<b>SA</b>	<b>Single Aisle</b>
<b>SIL</b>	<b>Service Information Letter</b>
<b>ULD</b>	<b>Unit Load Device</b>
<b>WB</b>	<b>Wide Body</b>