

**3M** Science.  
Applied to Life.™

3M Automotive and Aerospace Solutions Division

# Interior Adhesive Solutions

Meet OEM specifications and aviation regulations with weight-saving, time-saving, strong-bonding interior solutions.



# Solutions designed to fit your process.

Streamline operation. Win more OEM contracts. Find bonding solutions for all parts of an aircraft interior — plus the equipment to use them. Evolved from an ongoing collaboration between 3M scientists and OEM engineers, our adhesive solutions deliver exceptional mechanical performance, low density, optimal mixing, flexible cure times and exceptional durability.

- ▶ Meet the demanding requirements for quality, safety and weight
- ▶ Comply with FAA and EASA regulations
- ▶ Designed with REACH and RoHS compliance in mind
- ▶ Stored, applied and cured at room temperature
- ▶ Pumpable solutions fit within automated manufacturing
- ▶ Help reduce cycle time and manufacturing costs
- ▶ Global supply chain



Lavatories

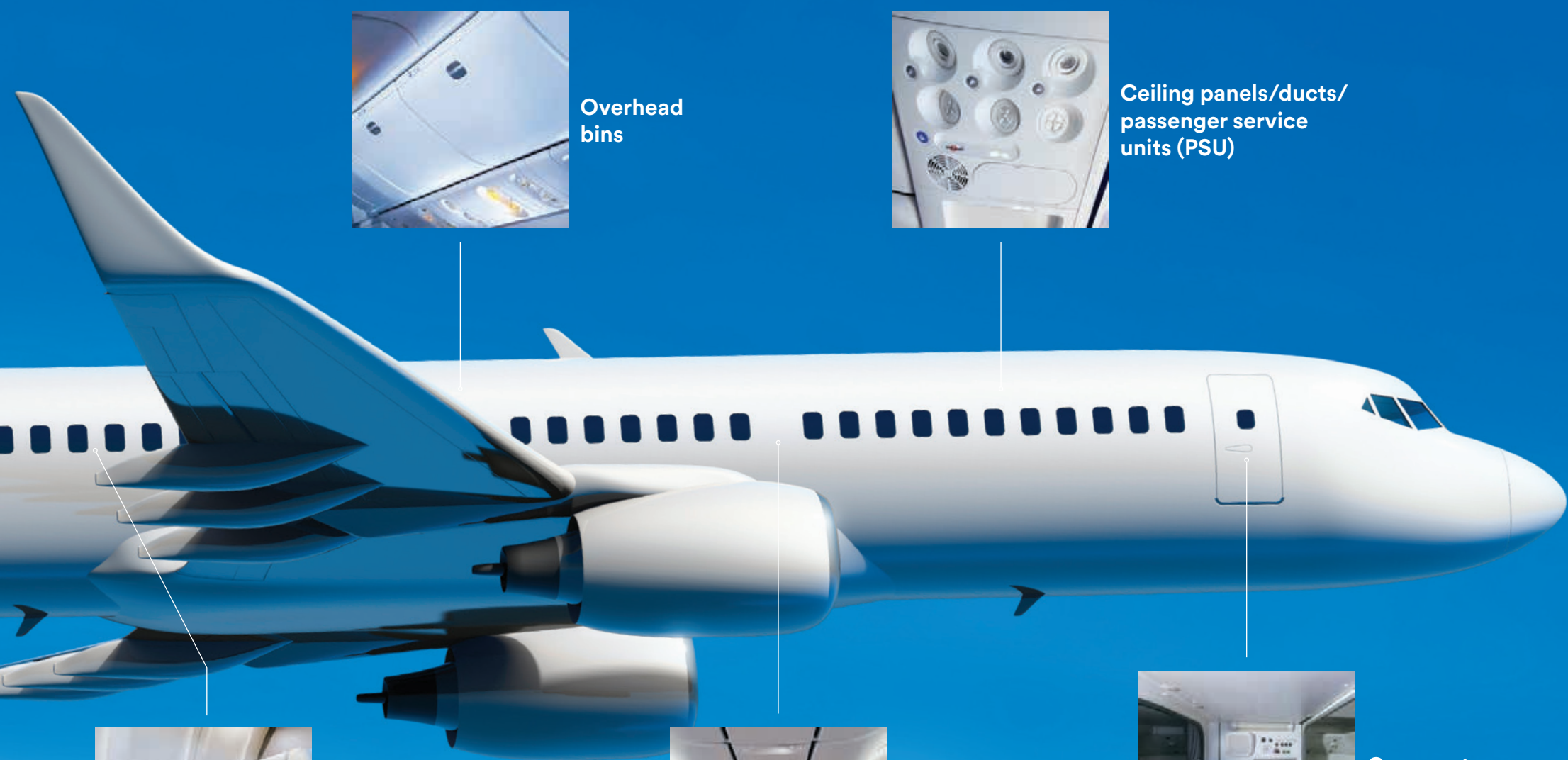


Galleys



Doors, class dividers and sidewalls





Overhead bins



Ceiling panels/ducts/  
passenger service  
units (PSU)



Seats/cup  
holders/  
sidewall panels



Monuments



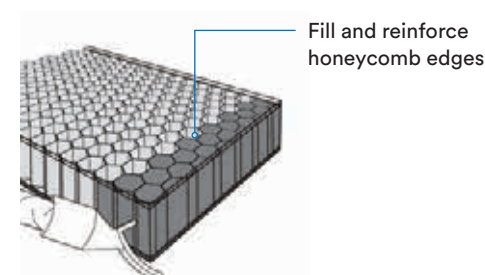
Crew rest  
areas

# Spend more time building and less time filling.

## 3M™ Edge and Void Fillers

Pump up productivity. Designed for filling mismatched areas and voids and reinforcing edges, 3M pumpable edge and void filling compounds combine high strength with industry-leading low density.

- ▶ Fully automated mixing and pumping for accelerated application process
- ▶ Lightweight compounds with a variety of cure speeds and compressive strengths
- ▶ Non-brittle property minimizes chipping and allows insert placement
- ▶ Non-sag property reduces touch-ups and rework
- ▶ FR and FST options



## Featured products

Product	Type	Hand mix	Extrudable (cartridge)	Colour	FR / FST	Compressive strength at room temperature MPa	Cured density (g/cm <sup>3</sup> )
3M™ Scotch-Weld™ Void Filling Compound 3450 FST	One-part	No	Yes	Light brown	FST	33*	0.64
3M™ Scotch-Weld™ Void Filling Compound 3524 B/A FST	Two-part	Yes	No	Grey	FST	23	0.55
3M™ Scotch-Weld™ Void Filling Compound EC-3550 B/A FST	Two-part	No	Yes	Light brown	FST	24	0.58

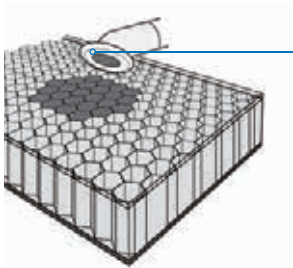
\*Cured at 125°C for 60 minutes

# Build lighter, stronger panels with less labour.

## 3M™ Core Reinforcement

Reinforce honeycomb and sandwich structures in load-bearing areas, such as overhead stowage compartments, partition walls, ceiling panels, galleys and lavatories. Our pumpable solutions save production time and labour costs — simply place cartridge in dispenser, add a nozzle and apply.

- ▶ Low density reduces weight of cabin furnishing
- ▶ Fully pumpable and automated for less hand work
- ▶ Fast cure at room temperature improves efficiency
- ▶ Moisture barrier and vibration dampener
- ▶ High compressive strength
- ▶ Designed to help users minimize their impact on the environment
- ▶ Thixotropic properties offer controlled flow and self levelling



Fill and reinforce load-bearing areas



## Featured products

Product	Type	Hand mix	Extrudable (cartridge)	Colour	FR / FST	Compressive strength at room temperature MPa	Cured density (g/cm <sup>3</sup> )
3M™ Scotch-Weld™ Void Filling Compound 3460 HT FST	One-part	No	Yes	Light brown	FST	68*	0.74
3M™ Scotch-Weld™ Void Filling Compound 3450 FST	One-part	No	Yes	Light brown	FST	33*	0.64

\*Cured at 125°C for 60 minutes



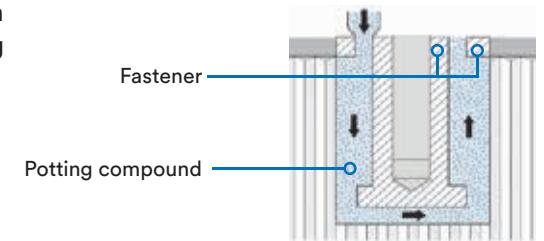
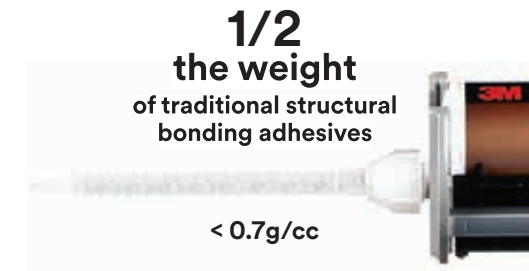


# Meet strength requirements with half the weight.

## 3M™ Potting Compounds

Need to cut weight from a ship-set? Apply 3M potting compounds, designed with high shear and torque strength, class-leading low density, easy flow for easy application and fast cure times. Our 3M glass bubble technology reduces weight, delivers high strength-to-weight ratio and has a consistent fast flow through dispensers. Easy-to-handle viscosity and fully pumpable systems save time and improve operational efficiency.

- ▶ Attach panel inserts quickly, consistently and securely
- ▶ Low viscosity enables extruding and pumping with automated dispensing equipment
- ▶ Fast cure at room temperature yields higher manufacturing throughput
- ▶ Advanced formulation results in consistent density during both storage and automated pumping



## Featured products

Product	Type	Extrudable (cartridge)	Bulk dispensable	Adhesive chemistry	Cured density (g/cm <sup>3</sup> )	FR/FST	Colour (mixed)	Room temperature OLS (Overlap Shear Strength) MPa (psi)	Handling strength at room temperature	Full cure at room temperature
3M™ Scotch-Weld™ Epoxy Adhesive EC-7246-2 B/A FST	Two-part	Yes	Yes	Epoxy	1.44	FST	Beige	15 (2180)	5 hours	7 days
3M™ Scotch-Weld™ Epoxy Adhesive EC-3542 B/A FR	Two-part	Yes	Yes	Epoxy	0.70	FR	White	13.3 (1927)	Available on request	7 days





4min to 5hrs  
work life

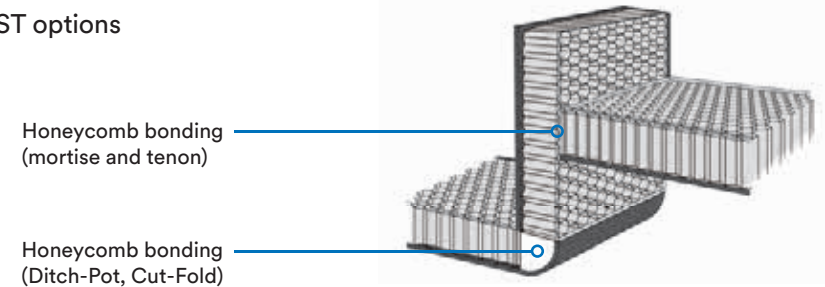
Operational  
flexibility

# The perfect cure for your operation.

## 3M™ Honeycomb Bonding

There can be no compromise when it comes to reliability. 3M honeycomb bonding solutions stand up to challenging conditions and offer operational flexibility, with a work life as short as 4 minutes or as long as 5 hours. Superior mechanical properties allow you to achieve high durability and light-weighting goals. These proven adhesives answer the demand for strength while enabling more compact and lightweight designs.

- ▶ Maximum shear, compressive and peel strength, based on your design and process parameters
- ▶ Fast to moderate handling strength time offers operational flexibility
- ▶ Highly durable to help provide high impact resistance
- ▶ Cure at room temperature
- ▶ Thixotropic properties offer controlled flow and sag
- ▶ FR and FST options



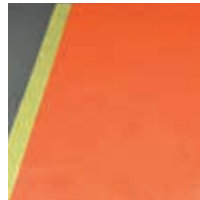
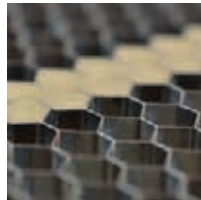
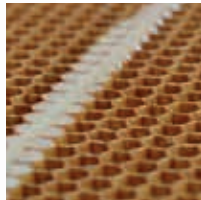
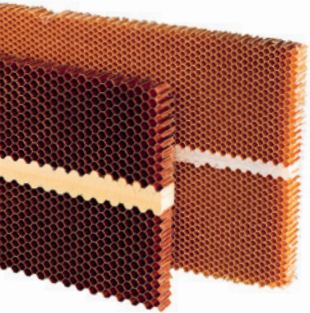
## Featured products

Product	Type	Extrudable (cartridge)	Bulk dispensable	Adhesive chemistry	Cured density (g/cm <sup>3</sup> )	FR/FST	Colour (mixed)	Room temperature OLS (Overlap Shear Strength) MPa (psi)	Handling strength at room temperature	Full cure at room temperature
3M™ Scotch-Weld™ Epoxy Adhesive EC-7246-2 B/A FST	Two-part	Yes	Yes	Epoxy	1.44	FST	Beige	15 (2180)	5 hours	7 days
3M™ Scotch-Weld™ Epoxy Adhesive EC-9300 B/A FST	Two-part	Yes	Yes	Epoxy	1.2	FST	Light brown	29 (4207)	10 to 15 hours	7 days
3M™ Scotch-Weld™ Epoxy Adhesive EC-2815 B/A FR	Two-part	Yes	Yes	Epoxy	1.4	FR	Light grey	34.5 (5000)	Available on request	24 hours



# Structural Adhesive Core Splice Films

3M low density, expandable, epoxy core splice adhesive films are designed to fill mismatched areas and gaps, splice honeycomb cores and finish edges of sandwich panels. These thermally expanding films are perfect for typical industry cure cycles of 120°C - 180°C. Developed to be co-cured with structural adhesive films and composite prepregs, they save time in manufacturing by eliminating post-cure finishing processes.



Bonding Solutions  
Honeycomb Core Splicing  
& Edge Finishing

## Featured products

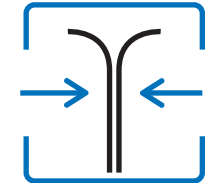
Product name	Colour	Cure temp. (°C)	Tube shear strength (MPa) <sup>1</sup> cured at 125°C			
			-55°C	24°C	82°C	
3M™ Scotch-Weld™ Structural Core Splice Adhesive Film AF 3070 FST	Light red/brown	125/175	11.3	7.1	4.8	<ul style="list-style-type: none"> <li>▶ Completely halogen free FST system</li> <li>▶ An expansion range of 50-75% for a 120°C cure</li> <li>▶ Low density product</li> </ul>
3M™ Scotch-Weld™ Structural Core Splice Adhesive Film AF 3074 FST	Grey	120/180	13	13	12	<ul style="list-style-type: none"> <li>▶ High and repeatable expansion rate</li> <li>▶ Compatible with 120°C and 180°C cure cycles</li> <li>▶ Extended shop and shelf life at room temperature.</li> </ul>



# The easy solution for hard-to-bond surfaces.

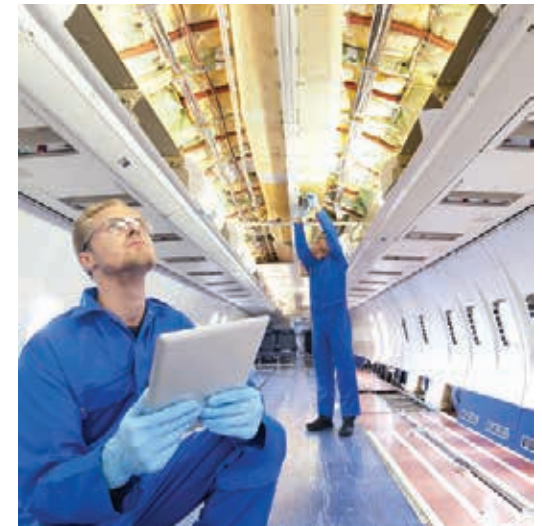
## 3M™ Thermoplastic Bonding

For bonding challenging materials together, this is a game changer. It's perfect for glass-phenolic composites and thermoplastic materials, including Polycarbonate (PC), Polyphenyl Sulfone (PPSU), Polyether Imide (PEI) and Acrylic-PVC. Use on tray tables, seat back covers, international first-class surrounds and more.



**Bonds**  
hard-to-bond  
surfaces

- ▶ Designed for interior substrates, such as glass-phenolic composites, aluminium and hard to-bond thermoplastics
- ▶ Can be used on metal and composite surfaces
- ▶ Very low sag formulation delivers controlled flow for vertical applications
- ▶ FST compliant



## Featured products

Product	Type	Extrudable (cartridge)	Bulk dispensable	Adhesive chemistry	Cured density (g/cm <sup>3</sup> )	FR/FST	Colour (mixed)	Room temperature OLS (Overlap Shear Strength) MPa (psi)	Handling strength at room temperature	Full cure at room temperature
3M™ Scotch-Weld™ Epoxy Adhesive EC-7246-2 B/A FST	Two-part	Yes	Yes	Epoxy	1.44	FST	Beige	15 (2180)	5 hours	7 days







# Give private jets a first-class finish in minutes.

## 3M™ Decorative Bonding

Need to bond wood veneers for an executive finish? Our durable bonding solution holds strongly and dries quickly in many different environments, including high temperatures.

- ▶ Bond in 20 minutes or less
- ▶ Can also be used for bonding gaskets and attaching de-icing boots
- ▶ High strength and temperature resistance
- ▶ Creates an even, consistent adhesive layer



## Featured products

### 3M™ Scotch-Weld™ Adhesive EC-1357

- ▶ Quick dry time with controlled flow
- ▶ Easily applied by spray, brush or roller to save time
- ▶ FR compliant in configuration

### 3M™ Scotch-Weld™ Contact Adhesive 30

- ▶ Water dispersed, sprayable contact adhesive with high bond strength and long bonding range
- ▶ Solvent-free
- ▶ Stays very flexible when dry

### 3M™ Scotch-Weld™ Contact Adhesive 2000NF

- ▶ Immediate bonding capabilities and handling strength without forced drying equipment
- ▶ Bonds to a wide variety of substrates

### 3M™ Fast Tack Water Based Adhesive 1000NF

- ▶ High performance water-based adhesive formulated for fast bonding and long term heat resistant bonds
- ▶ Adheres to a variety of substrates



**Quick**  
dry time

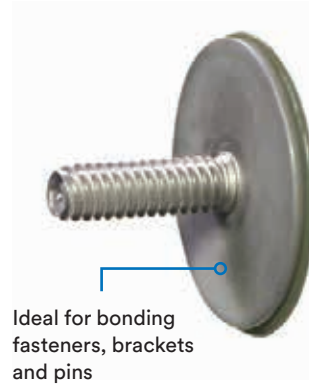


# Fewer steps, increased productivity.

## 3M™ Bracket Bonding

There are thousands of brackets in each airplane. Imagine how much time and money you could save with a faster, simplified process. Now imagine a revolutionary bracket adhesive that instantly holds — with no installation fixtures, no sag and no mess. Simply apply, bond and go.

- ▶ High green strength significantly reduces the need for installation fixtures
- ▶ Two steps — apply and bond — simplifies your process
- ▶ Low-flow adhesive can be used in vertical and overhead applications



Ideal for bonding fasteners, brackets and pins

**90**  
minutes cure time  
to handling strength



**Strong**  
Excellent shear  
and peel strength

**STEP 1:**  
Apply adhesive to bracket



**STEP 2:**  
Bond to desired surface

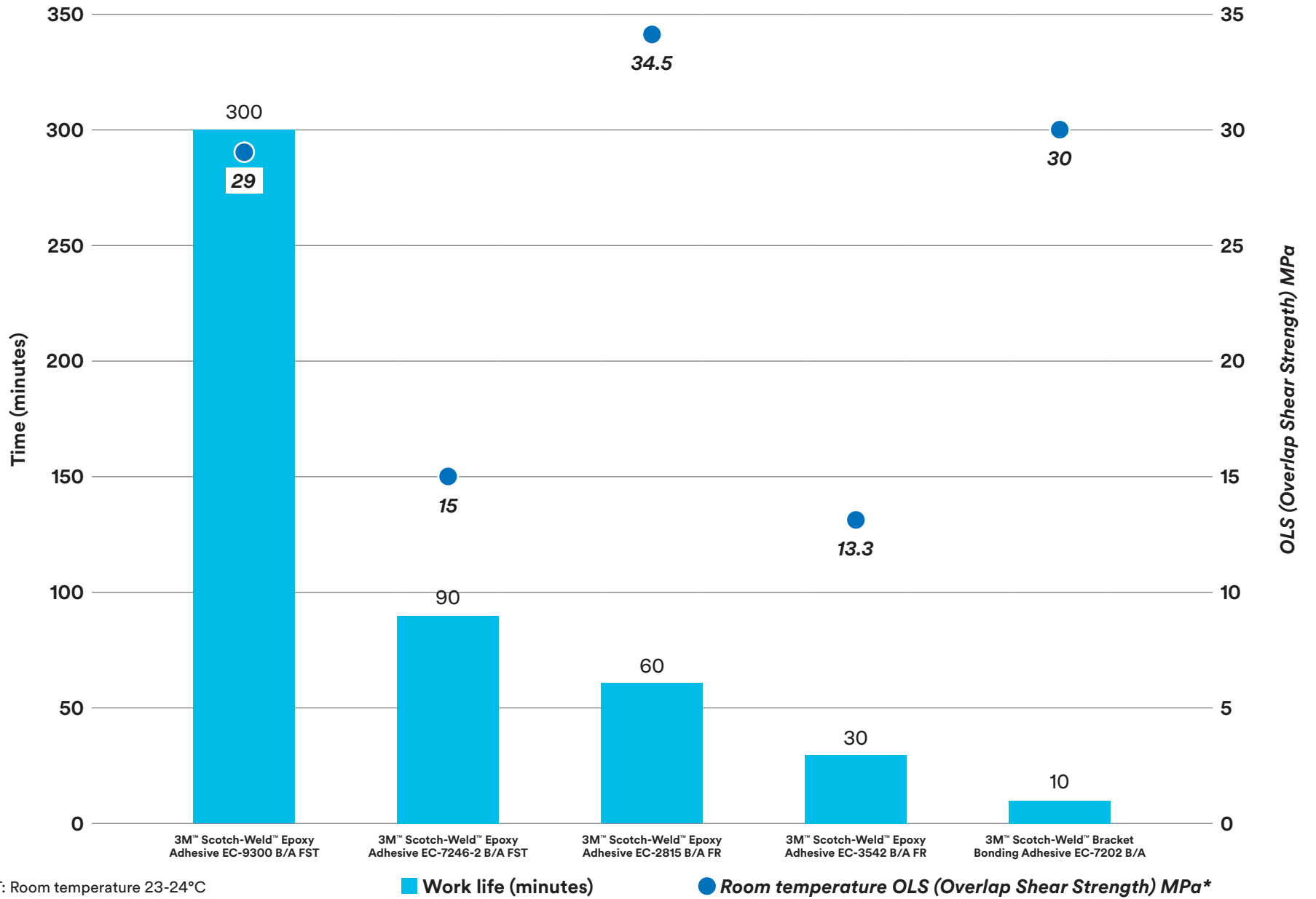


**Go** – no support needed



## Featured products

Product	Type	Extrudable (cartridge)	Adhesive chemistry	Colour (mixed)	Work life (10 g of mixed material, 23 °C)	Room temperature OLS (Overlap Shear Strength) MPa (psi)	Handling Strength at room temperature
3M™ Scotch-Weld™ Bracket Bonding Adhesive EC-7202 B/A	Two-part	Yes	Epoxy	Olive Green	10 min	30 (4351)	90 mins



\*RT: Room temperature 23-24°C



# Get the right applicator for your application.

## 3M™ Dispensing Solutions

Enhance production rates, reduce rework and get accurate adhesive placement.



### 3M™ Scotch-Weld™ EPX Pneumatic Applicators

- ▶ Pistol grip provides comfortable handling and control
- ▶ Dispenses 1:1 and 2:1 mix ratio adhesives
- ▶ Available for use with 50ml, 200ml, and 400ml case sizes

### 3M™ Scotch-Weld™ EPX Manual Applicators

- ▶ Available for use with 35ml, 43ml, 50ml, and 200ml case sizes
- ▶ Mixing nozzles sold separately



## Mixing nozzles

Simultaneously mix, meter and dispense 3M™ Scotch-Weld™ Two-Part Structural Adhesives easily and efficiently.

- ▶ Sulzer MIXPAC™ MC 13-12 or MC 13-18 for hand dispensers
- ▶ Sulzer MIXPAC™ MC 13-18 or MC 13-24 for bulk dispensing systems



## Automated systems

Our industry partnerships will help you meet your automation needs with 3M's compatible, pumpable adhesives.

## Applicators/ dispensers

Our manual and pneumatic applicators:

- ▶ Provide optimal pressure
- ▶ Fit with your work flow
- ▶ Fit product selection for different applications



## Custom dispensing tips for automation

Apply the right amount in the right place.

- ▶ Tips for edge fill, honeycomb reinforcement and partial cut filling
- ▶ Reduce time and waste
- ▶ Increase production rate

Global reach:

# Anything you need, anywhere in the world.

- ★ Sales and Marketing
- Aerospace Manufacturing
- Technical Specialist Support

**Product Use:** Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

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