

# ALUMINIUM PANEL REPAIR AND REPLACEMENT

APR01

**Should an aluminium exterior panel be repaired or replaced? It depends! There are many considerations to take into account when making decisions on aluminium panels. Being able to properly assess damage and repair or replace exterior panels requires understanding the properties, characteristics, design and construction of aluminium. Making the right decisions at the right time can play a role in improving KPIs like cycle time and CSI. Students will leave this course equipped to tackle this different, not difficult material.**

## Course Content

### Module 1—Cosmetic Aluminium Panel Overview

The first module begins with an overview of where aluminium is used and its characteristics. Techniques and certain differences between repairing aluminium and steel are given. The module will also explore damage considerations, panel straightening, paintless dent repair (PDR) straightening techniques and corrosion prevention.

### Module 2— Attachment Methods

As the course continues, the students will receive demonstrations and explanations of several panel attachment and removal methods including, adhesive bonding, threaded fasteners, bolted-on parts and rivets types and use. The students will also learn about preparation and application, including rivet bonding, hem flange removal, hemmed door skin replacement, welded exterior panel removal and joint preparation. Aluminium welding considerations such as welding tears and dressing the weld will also be covered.

### Module 3—Surface Preparation and Refinishing

The course concludes with coverage of surface preparation and refinishing considerations, such as prepping the surface for body filler, types of body fillers, primers and refinishing aluminium parts.

## Recommendations

This course covers information related to the basics of damage report writing and more. Understanding basic collision repair concepts is recommended. Courses that may be beneficial to take prior to this one include:

- Adhesive Bonding (ADH01)
- Aluminium Panels and Structures Damage Analysis (DAM05)

## Registration

To register for Aluminium Panel Repair and Replacement (APR01) click [here](#).

## Course Highlights

Points: 1

Estimated Duration: 4 Hours

Format: Classroom

Meets the I-CAR training requirements for the following roles:

-  ESTIMATOR
-  NON-STRUCTURAL TECHNICIAN
-  DAMAGE APPRAISER
-  ALUMINIUM TECHNICIAN

## After completing this course, you will be able to:

- Explain how hardening changes the characteristics of aluminium
- Describe how to use dye penetrant for locating damage
- Reduce cross contamination between metals
- Understand the importance of using dedicated tools for working on aluminium
- Explain the requirements of working with adhesives
- Describe how to hem a panel
- Understand some considerations for welding aluminium
- List the different processes used for removing damage in cosmetic panels
- Describe the different aluminium panel attachment methods
- Know how to prepare an aluminium surface for body filler and refinishing

