

Tech Bulletin: Control #1010
Title: ACM and Coping/Roofing Applications
Effective Date: 7/30/2018
Source: Laminators Engineering Group

Overview:

ACM panel installations continuing over the top of an exterior wall and seamlessly transitioning into a coping/roofing element has become an increasingly popular aesthetic among design professionals. This tech bulletin serves to provide design professionals an understanding of why ACM panel systems shall not be used in coping/roofing applications and presents alternative concepts to achieve a similar aesthetic.

Understanding the Code:

The International Building Code (IBC) prohibits the use of combustible exterior wall coverings on any application that extends over or above the top of the exterior wall (Section 1406.2.3 in IBC 2009 or Section 1406.2.2 in IBC 2012/2015). Per IBC Section 703.5, a non-combustible material must pass the testing requirements of ASTM E136; however, all ACM products, regardless of a “fire-retardant” or “fire-resistant” (FR) core, are considered “combustible” materials because they do not pass the testing requirements. Therefore, any manufacturer that supports coping or roofing applications with ACM products would be in violation of the building code without compliance with ASTM E136.

This part of the building code is easily overlooked when designing with ACM panel systems because it is included in Section 1406 *Combustible Materials on the Exterior Side of Exterior Walls* and not Section 1407 *Metal Composite Materials (MCM)*. Section 1407.1 indicates that the provisions of Section 1407 apply to ACM for exterior wall coverings “in addition to other applicable requirements of Chapters 14 and 16”; therefore, Section 1407 cannot be considered in isolation of these other code sections, and Section 1406 would also apply.

While an ACM panel system is designed to be installed as a veneer system over an exterior wall and meet the requirements of Chapter 14, it has not been designed, detailed, and tested as a roof covering. As such, an ACM panel system does not and should not meet the provisions of Chapter 15 *Roof Assemblies and Rooftop Structures*, including but not limited to, Weather Protection (Section 1503), Performance Requirements (Section 1504), and Fire Classification (Section 1505) of roof coverings. Therefore, an ACM panel system should not be designed or detailed in a manner utilizing it as a roofing element.

Achieving a Similar Aesthetic:

Design professionals can achieve a similar aesthetic to that of an ACM installation continuing over or above the top of an exterior wall by integrating the use of color-matched aluminum. Laminators is able to provide color-matched, flat-stock aluminum for all colors available in the Omega-Lite product line. Specific solutions vary by panel system, but details can be developed to achieve a functional coping or other top-side horizontal element while mimicking the look of an ACM panel. Please contact Laminators Technical Support (800.523.2347) for additional information and examples of installation options.