



Metal Roof Installation Manual

Chapter 1: Introduction

METAL CONSTRUCTION ASSOCIATION

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Chapter 1: Introduction

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1. INTRODUCTION

This installation training manual addresses the installation of metal roofing material and related accessories. It includes information pertaining to both new construction reroofing and retrofit projects.

Important Note: Different roof types require specific installation techniques. The information provided in this manual does not supercede installation instructions provided by the manufacturer. Always consult the manufacturer's instructions.

1.1 MCA Installer Training Manual

1.1.1 Purpose of the Manual

The MCA installation training manual was developed to improve the installation of metal roofing within the construction industry. The goal is to eliminate avoidable problems and reduce the need for additional work due to callbacks.

This installation training manual is intended for installers of metal roofs, related products and accessories.

Other professionals involved in the construction industry can benefit from this training manual. This includes architects, specification writers, contractors, building owners, manufacturers, and numerous others.

The specific objectives of the MCA installation training manual are to:

- Promote consistent, high quality installations; decreasing installation deficiencies; minimizing product failures and callbacks; while promoting energy efficiency and, thereby, lowering the ultimate cost to the consumer.
- Provide installers with the basic knowledge necessary for proper installation of typical

metal roofing products when following the manufacturer's installation instructions;

- Promote installer safety practices.

1.1.2 Using This Manual

This installation training manual was developed to provide information regarding the installation of most metal roofing products, and to serve as a reference for most types of metal roofing products and applications. This manual does not address the unique characteristics of factory assembled insulated metal panel roofs or special environments such as cold storage. The manual provides an overview of information relating to:

- The History of, and Introduction to, Metal Roofing Products and Materials
- Panel Attributes
- Roofing Design
- Sealants and Fasteners
- Installation of Products
- Common Accessories
- Specifications and Codes
- Final Cleaning and Inspection
- Re-roofing
- Installer Checklists

1.1.3 Skill and Knowledge Requirements of the Installer

This installation training manual assumes that the installer possesses the following basic knowledge and skills:

1. Basic measuring skills
2. A basic understanding of construction methods and techniques
3. An understanding of the proper use of tools normal to the roofing trade

The contributors to this document attempted to include the basic information needed.

However, it is not practical to include all information related to each product and its design options. In the event that an installer has any questions, or faces a situation not addressed in these materials, it is imperative that such uncertainties be resolved through consultation with the responsible parties before work is begun.

1.1.4 Responsibility of the Various Trades

For the purpose of this training manual, an installer is defined as someone who sets, anchors, seals, and/or applies metal roofing products and necessary flashing and trim. No differentiation is specified between a new construction installer and a replacement (retrofit) installer in this manual. Some of an installer's tasks may be performed by other individuals. As an example, one party may dry-in the roof by applying the peel and stick underlayment, another install the panels, and a third party install pipe penetrations and pipe boots.

Although the installer is responsible for the quality of the work performed, others (building contractor, developer, architect, etc.) are often the "approving authority" or "responsible parties" that make specific decisions that affect the installation. The approving authority is responsible for coordination and checking the quality of the work done by the various trades associated with the roofing. The construction sequence, proper coordination, and proper integration of all of the various building components are essential to the long-term performance of any completed installation. This is especially true of metal roofing.

It is desirable that the installer be actively involved in any additional roof work-related activities that may take place during a project, including those performed after the installation, if possible.

1.1.5 Timeliness of Information

This manual provides information which is current as of the date of publication. Always check the manufacturer's instructions and current information provided by the building and roofing industry for updates.

1.2 Development of the Installer Training Manual

The installation training manual is based on industry-accepted practices and principles that have been developed over the years by members of the MCA (Metal Construction Association) This association recognizes the need for consistent installation practices and is dedicated to the development of installation best practices. The best practices developed have allowed for the creation of this training manual offered by the MCA.

Experienced individuals and experts in the field provided input throughout the development of the installation training manual. A team of individuals from MCA was formed to assist in developing the manual based on material submitted or recommended by the MCA.

In addition, this training manual incorporates information offered by MCA members who are manufacturers and/or suppliers. Much of the information provided was incorporated into the language and graphics.

1.3 Acknowledgments

This installation training manual was developed with the support of the MCA and its many members. Through their efforts and dedication, both technical and financial, this program was made possible. Gratitude is extended to each individual and the organizations they represent.

Notes:
