STORAGE OF HOLLOW METAL DOORS AND FRAMES

PART I – INTRODUCTION

This guide specification is intended to stress the necessary precautions and requirements for receipt, storage, handling and installation of hollow metal products, and the skills essential in the hanging of doors. The proper performance of most products depends not only on how they are manufactured, but how they are installed. This is especial~ true of hollow metal doors and frames. The installation of doors and frames is an operation demanding care and skill, if the doors are to operate properly. Care in manufacturing does not, in itself, guarantee satisfactory performance. Even the best designed and most careful constructed frames and doors, if incorrectly installed, will not function properly. Hollow metal work is fabricated in accordance with the shop drawings, approved by the architect or engineer. Preparation for hardware or other items supplied by others is provided in accordance with the information furnished to the hollow metal manufacturer. The hollow metal manufacturer is a material supplier, not a subcontractor. The manufacturer does not include the installation of their product in the building, but only shipment in good condition from the factory. Should the General Contractor discover any error in the hollow metal delivered to the job site, it is imperative that the hollow metal manufacturer be notified in writing and allowed sufficient time before initiating any corrective measure in the field, so that the manufacturer can participate in solving the problem. Failure to do so could result in the cancellation of the warranty and/or fire label and non-acceptance of any cost associated with repair.

Most member companies of the Hollow Metal Manufacturer's Association Division of NAAMM have their own field representatives who are qualified not only to do expert repair work but to determine whether the fault lies with the manufacturer or with some other party. It is essential that material is properly stored prior to installation and skills are exercised in the setting of frames and hanging of doors.

RELATED DOCUMENTS

A. ANSI/A.250.11-2001 Recommended Erection Instructions for Steel Frames.
B. ANSI/NAAMM HMMA 801-05 Glossary of Terms for Hollow Metal Doors and Frames.
C. ANSI/NAAMM HMMA 841-07 Tolerances and Clearances for Commercial Hollow Metal Doors and Frames.
D. NAAMM HMMA 820-87 Hollow Metal Frames.
E. NFPA 80 Standard for Fire Doors and Other Opening Protective 2007 Edition.
F. SDI-122-90 Installation & Troubleshooting for Standard Steel Doors and Frames.

PART I – INTRODUCTION

A.RECEIVING

Upon delivery, the contractor responsible for receiving hollow metal products shall thoroughly inspect for damage. Cardboard and other wrappings shall be removed for inspection and to promote air circulation. Any scratches or disfigurements caused in shipping or handling shall be promptly cleaned and touched up with a direct to metal rust inhibitive primer. Should damaged material be found, the General Contractor has the option of refusing delivery or to accept the material as damaged.

For coordination purposes, HMMA suggests that delivery should not be refused, but rather accepted as damaged.

Any damaged items should be noted on the freight bill. Claims will not ha honored by the freight carrier, unless the damaged items are noted on the freight bill at the time of delivery.

The contractor shall notify the hollow metal manufacturer in writing immediately of any item signed for as damaged. The General Contractor must telephone or write the local office of the freight carrier and request an inspection of the damage. This procedure will help to expedite the repair or replacement of the damaged items and the processing of the damage claim with the freight carrier.

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B.ON SITE STORAGE

Proper storage of hollow metal work at the construction site will help prevent damage to the primer coat of paint. Prime coated steel must be protected when exposed to the elements such as high humidity, salt air, rain, snow, and/or damp wrappings etc.... Particular attention must, therefore, be given to steel products having a coat of factory applied primer. Primer is porous to properly receive and hold top coats.

Water or moisture, in contact with primer coated steel will seep through to the steel. An electrolytic action then follows, resulting in corrosion and causing the paint film to lose adhesion.

The presence of oxygen at the water-air interface behind the loosened paint film accelerates corrosive action and the prime coat further deteriorates.

Even when zinc coated steel is used to provide corrosion resistance, manufacturers of hollow metal door and frame products have found that one week of product exposure to water, due to improper storage, can be equivalent to at least a year of outdoor exposure to the elements.

NOTE:

Paint manufacturers advise that the primer typically used by hollow metal manufacturers should receive a finish coat of paint within 30 days of delivery.

It is the responsibility of the General Contractor to sand, touch up and clean prime painted surfaces prior to finish painting in accordance with the finish paint manufacturer's instructions.

The following procedures shall always be observed in storing Hollow Metal Doors and Frames at the job site:

1. Store all materials in a dry area, under cover. All products shall be stored where they will not be exposed to, or come in contact with the elements.

2. Do not use non-vented plastic or canvas. These materials create a humidity chamber, which promotes blistering and corrosion.

3. Store doors and frames in an upright position with heads uppermost, **Figures 1 and 2**.

4. Place no more than 5 doors or welded frames in a group. Small groups not only minimize the likelihood of damage due to excess handling, but also facilitate selection from the group for installation. In the case of multi opening frames, no more than three units should be stored in a group, to avoid serious damage to the bottom most frame.

5. Place all material on planking or blocking at least 4 in. (100 mm) off the ground, 2 in. (50mm) off a paved area or the floor slab.

6. Provide at least 1/4 in. (6.4 mm) space between all units to permit air circulation.

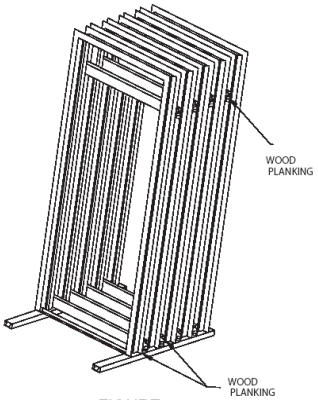

FIGURE 1
FRAME STORAGE

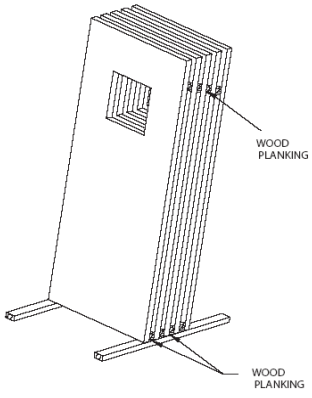

FIGURE 2
DOOR STORAGE

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Ver. 1.0 June 2017