

RACKING • MEZZANINES • CONTAINERS • CANTILEVER • SHELVING

**SPACE**



MANUFACTURING

## SAFE WORK PROCEDURES

### TABLE OF CONTENTS

- I. SCOPE
- II. APPLICABLE INSTALLER/OPERATOR TRAINING CERTIFICATE
- III. PERSONAL PROTECTIVE EQUIPMENT (P.P.E)
- IV. RECOMMENDED TOOL AND EQUIPMENT
- V. ESTABLISHING WORK AREAS
- VI. OFFLOAD PROCEDURE
- VII. PRODUCT HANDLING
- VIII. ASSEMBLY GUIDELINES & PROCEDURES
- IX. PROJECT COMPLETION AND SIGNOFF

DESIGN | MANUFACTURE | INSTALL



# SPACE MANUFACTURING

## I. SCOPE

The following 'Safe Work Guideline' is written for customers and distributors of Space Aid Manufacturing a division of M&P Tool Products Inc. These guidelines are minimum requirements and are to be followed to ensure safe and correct installation of your warehouse storage system.

This manual should not override existing safety policies, but can be used to ensure safe work practices are executed. Hazard Assessment, Safety Meetings and Project Status Meetings should be conducted regularly throughout the project.

## II. APPLICABLE INSTALLER/OPERATOR TRAINING CERTIFICATE

All installers/operators involved in the installation of the warehouse storage system shall be considered competent and should possess up to date training certificates. These certifications include but are not limited to;

- CWB Welding Certificate
- WHIMS Training
- Forklift Training and License
- Scissor Lift Training and License
- Fall Arrest Training
- First Aid (At least one on-site installer; preferable the supervisor)

Also, full safety protocol should be reviewed with all installers. This protocol should include evacuation procedures and any other existing end user safety policies.

Consideration should also be taken to ensure installers are covered by WSIB and have sufficient liability insurance.

## III. PERSONAL PROTECTIVE EQUIPMENT

While on-site all installers must wear proper Personal Protective Equipment as required for each task. P.P.E. includes but is not limited to;



Steel Toe/Shank  
Construction Footwear



Safety Shield / Mask



Hard hat



Safety Harness



Gloves (Welding)

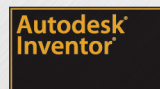


Safety Glasses  
(Grinding or Cutting)

## IV. RECOMMENDED TOOLS AND EQUIPMENT

The following equipment or suitable alternative is recommended to complete a warehouse storage system installation:

- 5000 lbs. Counter-balance Forklift (Propane or Electric)
- Scissor Lift or Elevating Platform w/19ft Top of Deck (30" Base Width)
- Mig Welder (if on-site welding is required)
- 3" 2ply HD 12' Web Sling Min. capacity 6900lbs choker hold X 3
- Standard Tools (ie. Hammer drill, impact gun, grinder, level, etc...)



call now, or visit [www.spaceaidmfg.com](http://www.spaceaidmfg.com) for more information

43 Regan Road, Brampton, Ontario

Tel: (905) 840-5550 | Fax: (905) 840-5560

Copyright © 2012 Space Aid Manufacturing/M & P Tool Products Inc.



## V. ESTABLISH WORK AREAS

In order to safely handle and build any warehouse storage system, safe work areas need to be established. These work areas include but are not limited to;

- Job site Information Area
- Offload Area
- Staging Area
- Assembly Area
- Work Area

The 'Job site Information Area' should be identified prior to the start of the project. This area is where all site meetings should be conducted and all important documents made available for review as necessary. These documents include installer certification, training, full drawing package, component drawings, permit information, insurance information, emergency contacts etc.

The 'Offload Area' is identified as the area where all loads can be safely unloaded with minimal interruption. When reviewing this area you must take into consideration forklift traffic, other transport trucks, any hazardous material storage, etc...

A suitable 'Staging Area' should be created in close proximity to the offload area as well as the work area to minimize the amount of product handling. All product bundles should be individually placed and safely stacked if required. Each type of product should be separated to allow for quick and easy access. The staging area should be cautioned off with tape and/or barricades. Minimal worker traffic should be permitted in the staging area. Only drivers and associated workers are required to be in the staging area.

The 'Assembly Area' should be established at safe distances from any hazards and clear of forklift traffic and activities. This area should also be in close proximity to the proposed work area.

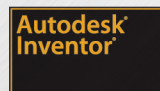
Finally, the 'Work Area', where actual building and future building will take place. This area should be cautioned off to prevent any individuals from entering unnoticed or without permission from the on-site Supervisor. This area is where product that is currently being built is transported from the staging area. Installation drawings should be available to all installers, customer and associated parties in this area.

## VI. OFFLOAD PROCEDURE

Each truck should be offloaded by a qualified operator. Each material bundle should be offloaded one at a time and should be safely balanced during transport. All products should be moved to the designated staging area. A spotter should be used when handling large bundles or when traveling through high traffic areas. See 'Establish Work Areas'.

## VII. PRODUCT HANDLING

Due to the size and weight of the material bundles extreme caution and safety must be used when transporting and erecting all systems. Once a bundle of material is unstrapped each component should be handled safely and larger components one at a time. The remaining larger components should be chained or restrained in order to prevent tip-over. Material handling can be assisted with straps when transporting from the staging area to the work area. Please see section 'Assembly Guidelines and Procedures', for detailed information on the methods for erecting.



call now, or visit [www.spaceaidmfg.com](http://www.spaceaidmfg.com) for more information

43 Regan Road, Brampton, Ontario

Tel: (905) 840-5550 | Fax: (905) 840-5560

Copyright © 2012 Space Aid Manufacturing/M & P Tool Products Inc.



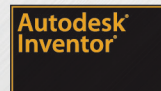
## VIII. BUILD METHODS & PROCEDURES

Components should be placed and configured exactly as per installation drawings supplied by Space Aid Manufacturing. Each system should be built to completion using the following guidelines. Find a starting point that is both suitable for material handling and has been referenced on the installation drawing. Assemble components progressively allowing for either bay or row completion. A chalk line or laser can be used to straighten using reference points of facility walls or building columns. Footplates or bases should be leveled with shims and ensure components are plumb and square. At this point the system can start to be anchored, maintain accurate reference points throughout duration of project and use the "Complete as you go" process.

During lifting of components, no worker should travel underneath the suspended load. Review the drawing periodically to ensure correct placement of components. Each row or bay should be built to completion before moving on to the next. The next row or bay should be measured off the previous row or bay to ensure consistency. Accuracy is of the utmost importance to ensure the system can be used properly.

## IX. PROJECT COMPLETION & SIGN-OFF

Upon completion of project a walk through should be done to ensure nothing has been overlooked. Review all bolts, nuts, anchors & safety accessories are secure and in place. Ensure all welds are consistent and clean. Review the installation drawing for any oversights. Finally, a full clean up of all packaging material, welding consumables and concrete dust should be done. At this point the system should be reviewed by the customer before getting a signoff for job completion.



call now, or visit [www.spaceaidmfg.com](http://www.spaceaidmfg.com) for more information

43 Regan Road, Brampton, Ontario

Tel: (905) 840-5550 | Fax: (905) 840-5560

Copyright © 2012 Space Aid Manufacturing/M & P Tool Products Inc.