



Phone (613) 746-4663
FAX (613) 746-4721
TOLL FREE PHONE # 1-888-423-2224
TOLL FREE FAX 1-800-465-8561
WEBSITE <http://www.ambico.com>
E-Mail: specialized@ambico.com

INSTALLATION, MAINTENANCE & OPERATING INSTRUCTIONS
FOR TORNADO DOORS

Table of Contents:

Table of Contents.....	1
1 Introduction.....	1
2 Safety Precautions.....	1
3 Installation.....	1
3.1 Frame Installation.....	2
3.1.1 Masonry Wall – Existing Wall Anchors.....	2
3.1.2 Masonry Wall – Masonry (T-Strap or Strap & Stirrup) Anchors.....	2
3.2 Door Installation.....	2
4 Door Hardware.....	3
5 Preventative Maintenance.....	3
5.1 Hinges.....	3
5.2 Latching Hardware.....	3

For successful operation and protective performance this tornado door and frame system must be installed as per these installation instructions. Any variations in installation require approval by Ambico Ltd.

Revisions:

1 Introduction

Thank you for choosing Ambico Ltd. Our high performance doors are proven to meet the highest industry standards and they will provide years of maintenance-free service. **It is therefore very important to follow the installation instructions.** AMBICO offers installation training for tornado products as part of an installation seminar.

2 Safety Precautions

Tornado doors can be heavy. A typical 3' x 7' door weighs between 180 – 200 lbs. For safety reasons, lifting equipment such as a fork lift and strap slings should be used to handle these doors.

3 Installation



Phone (613) 746-4663
FAX (613) 746-4721
TOLL FREE PHONE # 1-888-423-2224
TOLL FREE FAX 1-800-465-8561
WEBSITE <http://www.ambico.com>
E-Mail: specialized@ambico.com

INSTALLATION, MAINTENANCE & OPERATING INSTRUCTIONS **FOR TORNADO DOORS**

3.1 Frame Installation

3.1.1 Masonry Wall – Existing Wall Anchors

3.1.1.1 Position the frame in the opening and ensure it is plumb, level, and square. The base of the jambs must be installed at *finished floor height* to ensure proper clearances are achieved and that the hardware operates properly and engages fully. Frame should also be centered in the thickness of the wall, failure to do so will degrade the anchoring capacity of the bolts. This is less critical if frames are to be grout filled.

3.1.1.2 Using a drill bit that is the correct diameter for the anchors being used (standard is 3/8”) drill holes for the concrete anchors. The depth of the hole will depend on the length of anchor less the face dimension and stop height of the frame.

3.1.1.3 Clean out the holes with compressed air.

3.1.1.4 Use steel shims to shim the frame into proper position at all anchor locations. Ensure that frame is plumb and square.

3.1.1.5 Install and tighten the concrete anchors according to the manufacturer’s instructions.

3.1.1.6 Verify that frame as remained plumb and square. Adjust as necessary.

3.1.2 Masonry Wall – Masonry (T-Strap or Strap & Stirrup) Anchors

3.1.2.1 Position the frame in the rough opening and ensure it is plumb, level, and square. Ensure that the base of the jambs is set to the *finished floor height* to ensure proper clearances are achieved so that the hardware operates and engages correctly.

3.1.2.2 Position the ‘T’ anchors in the frame as the blocks are laid. Ensure that anchor spacing is no greater than 24”.

3.1.2.3 Grout-fill frame and let set.

3.2 Door Installation



Phone (613) 746-4663
FAX (613) 746-4721
TOLL FREE PHONE # 1-888-423-2224
TOLL FREE FAX 1-800-465-8561
WEBSITE <http://www.ambico.com>
E-Mail: specialized@ambico.com

INSTALLATION, MAINTENANCE & OPERATING INSTRUCTIONS **FOR TORNADO DOORS**

- 3.3 If not already completed, install Securitech hardware on/ in the door per Securitech installation instructions. Ensure that all bolts are operating correctly and that they throw 1”.
- 3.4 Stand door vertical and position using suitable lifting equipment.
- 3.5 Attach hinges, shimming as necessary to achieve a 1/8” gap at the top and both sides of the door. Standard tornado door undercut is 3/8”.
- 3.6 Mark the bolt locations as per Securitech instructions and drill the frame and/ or floor with appropriate drill size.
- 3.7 Verify that the door opens and secures properly. Bolts should throw and retract smoothly, if not the holes may need to be filed.

Note: Bolts must throw completely (1”) to ensure the tornado resistant assembly functions as an effective means of life safety.

4 Door Hardware

As per section 3.3, if Securitech hardware is not being supplied & installed by Ambico Ltd., install the Securitech hardware as per the manufacturer’s installation instructions.

5 Preventative Maintenance

5.1 Hinges

The hinges Ambico Ltd. supplies with tornado resistant doors are maintenance free.

5.2 Latching Hardware

Consult the Securitech’s installation instructions for operation and maintenance information.