# **American Chute LLC** 600 Twin Rail Drive Minooka, IL 60447



American Chute LLC www.american-chute.com

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# **American Chute**

**Easy-Wave** ® Chute System

**Wave Hello to the Future** 



### Introduction

The Easy-Wave® trash chute system is UL Listed and designed to lock out all other intake doors on the trash chute when a door is in use. This is to ensure the safety of users that interact with the chute. The Easy-Wave® system's signature feature allows touchless, one-handed operation that unlocks the chute door when a motion sensor is activated. In electric interlock systems, the user then manually opens the door and disposes of their trash, while in pneumatic interlock systems the door automatically opens, allowing the user to deposit their trash with ease. Each Easy-Wave® door is equipped with a motion sensor and an LED window. In systems with a trash sorter, a set of Easy-Push® buttons allow the user to select a trash sorting option.

The system is equipped with a Master Controller that facilitates overall management of the Easy-Wave® system and any connected devices. The Master Controller contains a monitoring system that streamlines chute maintenance by identifying where service is needed. It can configure the trash chute's responses to open doors, falling trash, and alarm states. It also facilitates the mapping of chute doors to building floor levels and the use of a connected chute wash-down system. The Master Controller is equipped with a Lock Out toggle switch and a user interface with a 32 character LCD, an LED window, and two push-buttons.

Our manual will provide information about the operation of the entire Easy-Wave® trash chute system.

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## UMT<sup>™</sup> 200 & 300 Series Sorters

The UMT<sup>™</sup> 200 & 300 Series 24" diameter Bi-Sorter & Tri Sorter was designed for multistory buildings that wish to sort recyclables away from the buildings trash with a single chute system.

The UMT<sup>™</sup> 200 & 300 Series 24" diameter Bi-Sorter & Tri-Sorter is installed below the buildings trash chute which will then allow the sorting mechanism to divert trash to a compactor or container and recyclables to a dedicated container. The diverter is controlled at each intake floor. The user selects the desired sorting type with the Easy-Push® button. If the sorter system is installed with our Easy-Wave® interlock system the selection buttons will be integral with the system.

#### SORTER SPECIFICATIONS

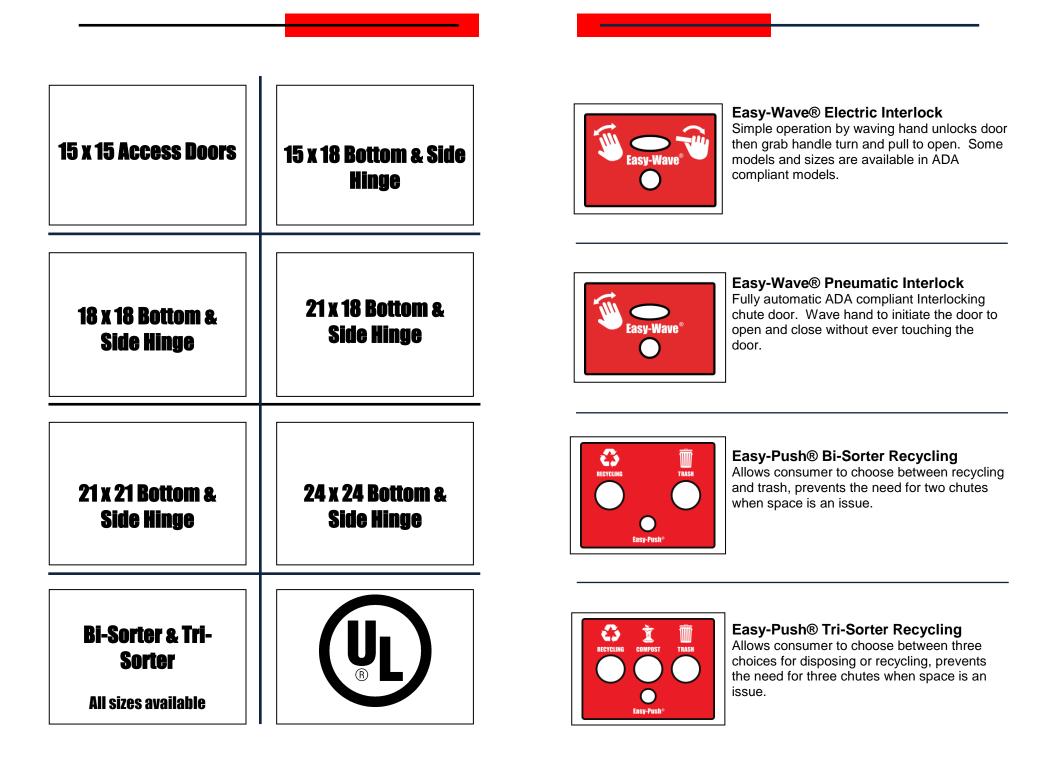
- The sorter body is constructed of ¼" thick steel which is continuously welded and has a powder coat finish.
- The diverter plate is constructed of 1/2" thick heavy duty grade aluminum.
- Support legs are adjustable to accommodate various compactors and containers.

#### ELECTRICAL SPECIFICATIONS

- The main control panel runs 115VAC nominal / 6 Amps maximum.
- All controls are 24 Volt DC.
- Main controller has a 32 character backlit LCD display.
- All electrical components are UL listed.
- Sensor based operation No mechanical limit switches to fail or go out of adjustment.
- System status is displayed at all times.
- Access door is safety interlocked to disable sorter when opened.
- Optional bin full sensors Sorter is locked out when bin is full.
- Optional bin present sensor Sorter locked out if bin is not present.
- All mechanical parts are enclosed to eliminate pinch point injuries.

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## **Easy-Wave® Interlock Doors**

#### Easy-Wave® Specifications:

- Low voltage Plug and Play for easy installation
- Lock Out feature for maintenance and safety
- System is B.A.S. compatible
- Sensor-based one-handed operation increases reliability
- Electrical and pneumatic interlocks may be installed in combination

#### **Electrical Specifications:**

- 120 VAC / 1 Amp service
- All controls are low voltage
- All electrical components are UL listed
- Sensor based operation no mechanical limit switches to fail or go out of adjustment
- Master Controller has a 32 character backlit LCD
- System status is displayed at all times on the Master Controller





## **Easy-Wave® Options**

### Easy-Wave® Automated Wash-Down System

This system consists of a Wash Down controller located at the top of the Chute. This controller incorporates the Easy-Wave® termination, so it must be the LAST device on the Easy-Wave® door chain. Also included are two solenoid valves, the soap injector, the soap solution reservoir equipped with a soap level sensor and the wash down spray head. All that needs to be done is for the plumber to hook up the water supply via a shut-off valve and vacuum break.

This system has the following features:

- Wash Down consisting of four timed cycles: WASH, SOAK, RINSE, DRY

- Each Cycle can be configured from 0 to 30 minute durations. Setting the duration to 0 skips the cycle.

- Warning is given if soap solution is  $\ensuremath{\mathsf{LOW}}\xspace$  – but the wash cycle will proceed.

- Chute automatically goes back into service as soon as the Wash Down completes.

- Simple interaction for starting a Wash Down:
  - -- Toggle Lock Switch to LOCKED to lock out the chute.
  - -- Press MENU Button to select "WASH DOWN System"
  - -- Press SELECT button to select "Start Wash Down"
  - -- Toggle Lock Switch to OFF to initiate the Wash Down.

- Ability to cancel the Wash Down from the base station if desired.

### Easy-Wave® BACnet Interface

The Master Controller supports the BACnet interface to the Building Automation System (BAS). The following BACnet registers are supported by the Master Controller via the BACnet interface device. Additional registers may be added as the capabilities of the Easy-Wave® system increase.

#### Multi-State Open Objects

- Door Open Level
- Chute Fault Code

#### Binary Objects

- Chute Busy
  - Fire Alarm
  - Wash Down
  - Operation

## Control Points on the Chute that can be set by the BAS

#### Binary Objects

- Chute Lock Out
- Trigger Fire Alarm
- Initiate Wash Cycle