MAINTENANCE, REPAIR & OPERATION INSTRUCTIONS

Chute Maintenance

The maintenance required for the chute itself is periodic flushing to keep it clean. A flushing spray head is furnished at the top of each chute as standard equipment. When supplied with water, preferable hot, the head radiates a flow of water to the inner chute wall. The water flow down the chute walls will tend to channel when first started but will spread out as cleaning occurs. How often and how long the chute should be flushed depends upon the many variables such as chute usage, size, condition, and water temperature and pressure.

Maintenance in the sense of lubrication or replacing worn parts is confined primarily to the intake doors. For average usage, the door bearings, linkage, and latch should be oiled once every six (6) months. At this same six (6) month interval, material that may accumulate below the bottom edge of the bottom hinged door and inside the mechanism box of any type door should be cleaned out.

The chute intake door parts more likely to wear out are the hydraulic closure, the door latch, or the pivot bearings. The doors have been sample tested at the factory for an equivalent of several years hard usage, but it is difficult to simulate some of the conditions that may be imposed in the field or maintain quality control on all parts.

Expendable items such as automatic sprinkler heads or fusible links that fuse in case of a fire must be replaced after the fire is extinguished.

MAINTENANCE PROCEDURES FOR WILKINSON CHUTES

Bottom Hinged, Hand and Foot Operated Intake Doors

Every six (6) months -

- Oil shaft bearing, latch assembly, bushing at base of connector bar and grease inside of mechanism cover.
- Clean dirt from back of lower angle frame which may accumulate and prevent door from closing.

FOR ACCESS TO CLOSING MECHANISM:

a. Remove right hand trim exposing part mechanism cover.
b. Remove screws securing mechanism cover and use screw driver as lever at top of cover to remove. Cover is under spring pressure of hydraulic cylinder to assure positive closing.

Side Hinged, Hand Operated Intake Doors

Every six (6) months - Oil latch assembly.

Disinfecting and Sanitizing Unit

Check fluid Disinfecting and Sanitizing Unit periodically.

Flush CHUTE down every fifteen (15) days.
Operation and Maintenance Instructions

for

LINEN CHUTE SYSTEMS
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Chapter 1: SAFETY – RULE #1

MOUNT THE COPY OF THIS PAGE THE LINEN ROOM

1. WHENEVER ANY MAINTENANCE OR SERVICE IS TO BE PERFORMED ON THE LINEN CHUTE SYSTEM, THE ENTIRE SYSTEM SHOULD BE TAKEN OUT OF SERVICE BY LOCKING ALL OF THE INTAKE DOORS ON THE CHUTE.

2. NEVER PLACE ANY PORTION OF THE BODY INSIDE THE AREA OF THE DISCHARGE OF THE LINEN CHUTE. MATERIAL EXITING THE LINEN CHUTE MAY CAUSE SERIOUS BODILY INJURY OR DEATH.

3. ALWAYS WEAR SAFETY GLASSES, GLOVES, STEEL-TIPPED SHOES AND A HARD HAT WHEN MAINTAINING THE LINEN CHUTE SYSTEM.

4. NEVER CLimb OR REACH INTO THE LINEN CHUTE TO RETRIEVE OBJECTS OR ARTICLES.

5. COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE FOLLOWING DOCUMENTS:
   A. ANSI A12.1-1973 - SAFETY REQUIREMENTS FOR FLOOR AND WALL OPENINGS, RAILINGS AND TOE BOARDS.
   B. OCCUPATIONAL HEALTH AND SAFETY ACT- (OSHA)

6. ELECTRICALLY INTERLOCK (EI) DOORS CONTAIN HIGH VOLTAGE. MISUSE OF THESE DOORS COULD RESULT IN SERIOUS INJURY OR DEATH. ONLY QUALIFIED PERSONNEL SHOULD PERFORM MAINTENANCE ON THIS EQUIPMENT.
Chapter 2: Installation

WARNING:
Only experienced personnel should attempt to install, service, or operate this equipment. Installing this equipment requires the installer to work within confined spaces and in areas where fall protection may be required. Working in both of these areas can cause serious injury or death if the proper procedures and equipment are not utilized.

2.1 Introduction
This instruction manual includes information detailing the installation, operation and maintenance of Wilkinson Hi-Rise linen chute system.

Sufficient information is included in this manual to aid qualified personnel in correctly installing, operating and maintaining this equipment. Added technical help is available through your local manufacturer’s representative or directly from the manufacturer. Refer to the appropriate sources as required. It is assumed that a specific location for the linen chute system has already been established with the assistance of the manufacturer’s representative and qualified personnel will be utilized to install this equipment.

2.2 Linen Chute Installation Instructions
It is preferred that the walls surrounding the chute assembly are not in place at time of installation. The walls surrounding the linen chute are to be erected by the contractor only after the chute has been completely installed. When job sight conditions warrant a more expedient method of assembly, at a minimum, the face wall (the wall the intake door mounts into), should be left open until the chute is completed in all respects of the installation including but not limited to fire sprinkler connections, electrical connections, and any other options as specified in the contract documents.

1. First, locate and identify all intake sections. Place sections on appropriate floors. Each section will be marked numerically to correspond to shop drawings

2. When starting installation, start at the floor above discharge area.

3. Openings in the floor should already be present. Place the floor frame over the opening (DO NOT FASTEN FLOOR FRAME AT THIS TIME.)

4. Place intake section over the floor frame (“S” clips or angled clips should slip over the floor frame.) Go to the discharge area and connect discharge and any other appropriate sections to the intake above the discharge area. (Whether “A” discharge or type “H” discharge section should be clipped together, however type “H” discharge will require a pipe pedestal for support.)

5. Return to floor above discharge area and place the “B” section onto the intake.

6. Go to next floor and repeat steps 3, 4, and 6 until you’ve reached the vent area.

7. Place vent piece (section of chute that passes through roof.)

8. Go to roof and place flashing collar over the vent piece then connect the vent body with wind band.

9. After all floors have been installed fasten floor frames to floor.

10. Connect intermediate 1 ½ inch IPS-165 degree fusible link automatic sprinkler-to-sprinkler line.

11. If applicable, connect Disinfecting and Sanitizing unit (D&S Unit) with separate hot water line if present. If hot water line is not present, utilize cold water line.

12. Return to discharge area and connect fusible link on the discharge so that the door is in an open position.
Chapter 3: Operation

3.1 Description of Operation

1. The Wilkinson linen chute is designed to accept bulk linen and towels.
2. The linen chute is NOT designed to handle any type of garbage and refuse in that this material may stain or damage the chute causing stains or tears in linens.
3. For optimum performance, linens or towels should be wrapped in a ball and placed in the chute. By performing this step, it will minimize clogging in the chute.¹

¹ Please note: If clogging does occur, contact your local Wilkinson representative to assist in correcting the clogging problem. If not done correctly, the chute may be damaged.

Also, clogging of the chute due to improper use of linen chute IS NOT covered under the manufacturer's warranty for this system. You will be charged an applicable service fee if a Wilkinson representative is called to the site and the clogging is due to the improper use of the linen chute system.

3.2 Operation of Linen Chute Doors

The operation of the linen chute doors is as follows:

Please note: If the Linen chute is equipped with Electrical Interlock (EI) doors, the system is designed to allow only one (1) user access to the Linen chute at a time. Once a Linen chute door is opened, the remaining Linen doors “lock-out” and will not “unlock” until the Linen door that is open is returned to the closed position.

1. Grab on to handle and activate release latch with thumb (² See below if linen chute door is equipped with T-Handles)
2. Pull door toward you until fully opened
3. Deposit linen in open area of linen chute door
4. Release handle and door will automatically shut

² If the linen chute doors are equipped with T-handles, to open, grab the T-handle and turn clockwise. Follow steps 2-4 listed above.

3.3 Locking of Linen Chute Doors

Most of Wilkinson's linen chutes are furnished with a lock on each intake door. To lock the intake door to prevent the use of the linen chute, insert key that was furnished with linen chute into the key slot on the front of the door and turn until door remains locked.

If locks were not furnished with the linen chute door, it is imperative to provide users with the proper signage informing them that the chute is shut down if required maintenance is being performed. Failure to shut down the linen chute while maintenance is occurring may result in serious injury or even death.

3.4 EI Door Lock-out Switch

If the Linen chute system is equipped with an EI door system, it will most likely have a LOCK OUT switch installed in the Linen room. The LOCK OUT switch allows the operator to manually lock down the Linen chute intake doors by energizing the locking solenoid installed in each door.

The LOCK OUT switch has a RED and GREEN light installed on the front of the panel. When the system is in NORMAL operation, NEITHER light will be illuminated. When the system is LOCKED DOWN, the RED light will be illuminated. The system is LOCKED DOWN by activating the switch
installed in the panel. The LOCK OUT switch is factory calibrated to LOCK OUT the intake doors for a period of approximately 45 minutes.

After this time frame, the LOCK OUT switch will TIME OUT and the locking solenoids will be de-energized and the chute will be accessible again. The GREEN light will then illuminate on the LOCK OUT switch that indicates the system needs to be RESET. Activating the switch UP AND DOWN until NO lights are illuminated on the LOCK OUT switch RESETS the system.

*Please note: The lock out switch is factory calibrated to LOCK OUT the Linen chute doors for approximately 45 minutes. It is NOT recommended that the locking solenoids stay activated for longer than 45 minutes in that this may damage the solenoids.*

Once the system is locked down for 45 minutes, it should NOT be LOCKED OUT again for at least 90 minutes to allow the heat that has built up in the locking solenoids to dissipate. LOCKING OUT the system before 90 minutes may damage the locking solenoids and will not allow system to operate as designed.

*Damaged locking solenoids due to the system being locked out incorrectly will VOID THE WARRANTY on the system and the components.*

**Chapter 4: Periodic & Preventive Maintenance**

4.1 **Introduction**
As with any mechanical devices, this system must be regularly maintained to ensure the system will operate long-term and trouble-free.

The periodic maintenance is regular cleaning and inspection of the entire systems and its attachments. The chute will need to be kept free of build-up of dust, lint or other foreign objects. It is recommended the following procedures be followed at a minimum:

4.2 **WEEKLY Maintenance**
1. Clean LINEN chute doors to remove any build up inside the door that may prevent them from closing properly.
2. Clean the areas adjacent to linen doors.
3. If applicable, DEODORIZE AND SANITIZE the entire chute system utilizing the D&S unit installed at the top of the chute. The D&S unit should be operated for 5 MINUTES per 20 FLOORS of chute. For linen chutes with fewer than 20 floors, the D&S unit should be operated for a minimum of 5 minutes per week.
   a. Utilize standard industrial cleaner in the reservoir of the D&S unit. However, it is recommended that an "Organic" type cleaner be used because the majority of the wash down fluid will be directed to the floor drain installed in the linen room. SIMPLE GREEN or equivalent.

4.3 **Periodic Maintenance**
1. Follow LUBRICATION schedule for linen chute doors detailed in ATTACHMENT 1 of this document. Lubricate utilizing WD-40 or other type industrial lubrication agents.
2. Follow CLEANING schedule for linen chute doors detailed in ATTACHMENT 1 of this document.
Chapter 5: Troubleshooting and Maintenance

5.0 Introduction - Following are some common troubleshooting tips for the Wilkinson Hi-Rise Linen Chute Systems

Linen Chute door will not open
1. Ensure the door is not locked; if so, unlock
2. Ensure that thumb latch or T-handle is releasing catch on top of door. If not, call local Wilkinson representative for replacement
3. The linen chute doors are very simple to operate so if you are not successful in opening the door with either 1 or 2, call your local Wilkinson representative for service

No linen is exiting the linen chute
1. Check linen chute for clogging
2. Be sure system is in operation
ATTACHMENT 1: Linen Chute Door Drawings with Maintenance Instructions
MAINTENANCE INSTRUCTIONS

1. LUBRICATION: EACH SIX (6) MONTHS OIL PARTS:
   91A032 LATCH SYS, 91A052 SOLENOID, 91E005 ROLLER SWITCH

Our standard side hinged door unit is fabricated of
AISI Type 302 / 304 stainless steel with a standard
Satin finish #3 directional polish.
All doors have a noiseless self-closing mechanism
that is spring actuated with a hydraulic check to
restrict the closing speed.
Our doors bear a 1½ HRS. 250° UL "B" label
It can be used in masonry and drywall
Applications. The door can be hinged left or right
depending on the customers needs.
To Next Floors

HEAT DETECTOR (IF REQUIRED).

(Installed above top Intake of Trash chute.)

EI INTAKE BOX

Next Floors

SMOKE DETECTOR

(Installed in Trash Room.)

LOCKOUT SWITCH

Connect to 120 VAC Power Supply

LEGEND

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>DESC.</th>
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</thead>
<tbody>
<tr>
<td>GR/OF Switch</td>
<td></td>
</tr>
<tr>
<td>RED LIGHT</td>
<td></td>
</tr>
<tr>
<td>GREEN LIGHT</td>
<td></td>
</tr>
<tr>
<td>SOLDER</td>
<td></td>
</tr>
<tr>
<td>ROLLER SWITCH</td>
<td></td>
</tr>
</tbody>
</table>

WILKINSON-HI-RISE
2521 Evans Street
Hollywood, FL 33020
Tel: 800 231 3800 Fax: 954 342 43 38

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
FRACTIONAL DIMENSIONS ±1/32"
DECIMAL DIMENSIONS ±0.010"
ANGULARITY ±1°
MACHINED SURFACES \( ^\text{H} \)

DRAWING #:
NON #
<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>14312I 1</td>
<td>24&quot;0 Chute: Galv. WITHOUT Sound Dampening</td>
</tr>
<tr>
<td>288ANR 2</td>
<td>18&quot; x 18&quot; RIGHT HINGED, HAND OPERATED</td>
</tr>
<tr>
<td>2001SH 3</td>
<td>Discharge Door - See detail sheet (Page #2)</td>
</tr>
<tr>
<td>14412T 4</td>
<td>24&quot;0 x 18&quot; Pipe - WITHOUT Sound Dampening</td>
</tr>
<tr>
<td>14212T 5</td>
<td>24&quot;0 x 24&quot; Pipe - WITHOUT Sound Dampening</td>
</tr>
<tr>
<td>14112T 6</td>
<td>24&quot;0 x 12&quot; Pipe - WITHOUT Sound Dampening</td>
</tr>
<tr>
<td>14112Z 7</td>
<td>24&quot;0 x 12&quot; Pipe - WITHOUT Sound Dampening</td>
</tr>
<tr>
<td>14042W 8</td>
<td>Floor Frames - See detail sheet (Page #3)</td>
</tr>
<tr>
<td>91F006 9</td>
<td>Sprinkler Heads - See detail sheet (Page #3)</td>
</tr>
<tr>
<td>14112V 10</td>
<td>Full diameter Vent With Flat Flashing. No Screen.</td>
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</tbody>
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**Diagram:**

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**Notes:**

- SPRINGHILL SUITES
- Job #: DI11755
- Address: UT

**Details:**

- PART NUMBER
- DESCRIPTION
- QTY

**Legend:**

- 24"0 Chute: Galvanneal
- WITHOUT Sound Dampening
- 18" x 18" RIGHT HINGED
- 24" x 12" High Top Hinged, Counterbalanced Stainless Steel door with Exhale Latch
- Discharge Door - See detail sheet (Page #2)
- 24" x 18" Pipe - WITHOUT Sound Dampening
- 24" x 24" Pipe - WITHOUT Sound Dampening
- 24" x 12" Pipe - WITHOUT Sound Dampening
- Full diameter Vent With Flat Flashing. No Screen.
WILKINSON-HI-RISE

INTAKE SIDE VIEW

DISCHARGE H

DISCHARGE PLAN VIEW

INTAKE PLAN VIEW-TYPICAL VIEW

INTAKE SIDE VIEW-TYPICAL VIEW

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NOTE:

1. All Chutes to have Wilkinson type vertical lock-seams and inside tap round-about joint. See Detail sheet. (Or whatever we reference the detail info in the shop drawings)

2. All cutting of floors, walls, or roof to allow for chute installation to be done by others

3. Chute venting per NFPA 82 - Full size vent extending 3 ft above finished roof.

4. Wilkinson Hi-Rise complies with all NFPA guidelines and accepts no responsibility for the deviation of these standards by local codes or ordinances.
COMPANION CLIPS DETAIL

ENCLOSING WALLS AROUND CHUTES ARE NOT TO BE ERECTED UNTIL AFTER CHUTE IS INSTALLED.

CONTRACTOR TO VERIFY AND APPROVE ALL DIMENSIONS ON THIS DRAWING WITH CONDITIONS AT THE JOB SITE. WILKINSON IS NOT RESPONSIBLE FOR DEVIATIONS FROM THIS DRAWING ONCE APPROVED.

FLOOR FRAME
1-1/2"x1-1/2"x3/4" steel angle supports provided at each floor level. Steel hanger clips are factory welded at 90° onto chute.

WATER CONNECTION BY OTHERS.

INTERMITTENT 1-1/2"-1-1/2" PENDANT GLASS BULB SPRINKLER

NOTE: ANGLE IRON DOOR FRAME MUST BE INSTALLED FLUSH WITH FINISHED WALL FACE.

WILKINSON-HI-RISE
3001 Greene Street
Hollywood, FL 33020
Tel: 800 231 3888

CUSTOMER: Action Compaction Equipment

Job: SPRINGHILL SUITES
Address: UT
Job # 1: DI11755

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