38-26-SURFACE

PAGE 2 of 2

SURFACE MOUNTED CONTINUOUS BASE INSTALLATION

This configuration is most often used for fleet maintenance, repair and service applications.

The lift unit translates to the rear approximately 36 1/8" during the vertical articulation.

D-size

FRONT ELEVATION VIEW
STANDARD CONSOLE LOCATION LAYOUT

SEE NOTE 18 IN REGARDS TO ALTERNATE LOCATIONS

38-26-SURFACE

NOTICE OF CONFIDENTIAL INFORMATION

NOTED:
1. REMOVE ALL SHARP CORNERS & EDGES
2. UNLESS OTHERWISE SPECIFIED, SURFACE FINISH TO BE LIS NHL
3. WELDING METAL SHOULD COMPLY TO AWS SPECIFICATIONS TO E-7018 ELECTRODE OR E-7018 CORE 50 FILL (CORE) WIRE ONLY

MOHAWK RESOURCES LTD.

SCALE DRAWN
P-3710- 300
CHECKED APPROVED
FILE NAME P-3710-D-001
DATE 12/3/09
WEIGHT LB TRACING NUMBER P-3710-D-001
LIFT & CONSOLE SUBGRADE CONDUIT LOCATIONS, SECTION VIEWS

UNITS = INCH (mm)
= POUND (kg)

SEAL BARRIER AT EACH CONDUIT GOING TO LIFT UNIT (BY OTHERS)

AIR MANIFOLD

OPERATOR SIDE OF POWER CONSOLE

INCOMING AIR LINE (BY OTHERS)

JUNCTION BOX

FLEX CONDUIT FOR INCOMING POWERLINE (BY OTHERS)
SEE NOTES 19 & 20

18.00 (457) MIN
20.00 (508) MAX

TO LIFT UNIT

SECTION B-B

SECTION C-C

SECTION D-D

NOTICE OF CONFIDENTIAL INFORMATION

1. REMOVE ALL SNAP (COVERS & FIXES).
2. UNLESS OTHERWISE SPECIFIED, SURFACE PAINT TO BE JAS ONE.
3. WELDING MUST CONFORM TO AWWA SPECIFICATIONS TO EXHAUST ELECTRICALS OF E-790 LINE OR FLEX CORE WIRE ONLY.

MOHAWK RESOURCES LTD.
TOP VIEW OF CONSOLE FRAME

1 3/4 TYP (44)

UNITS = INCH (mm)

CONTROLL PANEL

BACK

INCOMING CONDUITS TO PROTRUDE FROM FLOOR ~18" (460-500 mm) AS SHOWN (SEE TOP VIEW)

CONDUCT SIZES & APPLICATION:
A: 1" (25.4) (MIN) SCHED 40 STEEL PIPE - INCOMING POWER CUSTOMER PREFERENCE
B: 1" (25.4) (MIN) SCHED 40 STEEL PIPE - INCOMING AIRLINE
C,D: 4" (101) SCHED 40 PVC PIPE - HYDRAULIC & AIR TO LIFT OPTIONAL
E,F,G,H: 1" (25.4) (MIN) SCHED 40 STEEL PIPE - ELECTRICAL TO LIFT

* NOTE: USE SMOOTH ELECTRICAL 90'S IN CONDUITS, NOT PLUMBING 90'S!!

CONTROL CONSOLE & STUB-UP DETAILS
ANCHOR DETAILS & SHIMMING

UNITS = INCH (mm) = POUND (kg)

INSTALLATION INSTRUCTIONS

1. Drill the hole perpendicular to the work surface. To assure full holding power, do not reach the hole or allow the drill to wobble.
2. Drill the hole deeper than the intended embedment of the anchor. Do not allow clover than two anchor diameters to the bottom (opposite) surface of the concrete.
3. Clean the hole using compressed air and a nylon brush. A clean hole is necessary for proper performance.
4. Turn the nut onto the anchor until contact is made with the top of the shears and the bottom of the washer. Insert anchor into hole.
5. Tap anchor into hole with a 2 1/2 lbs (1.1 kg) hammer until washer rests squarely against fixture.
6. Tighten the nut to 80 ft-lbs (109 N-m) maximum torque and not less than 3 full turns, but not more than 5 turns past the hand tight position. (Use of an impact wrench for installation of anchors is not recommended.)

REPRESENTATIVE TIGHTENING SEQUENCE FOR ANCHOR BOLTS

TIGHTENING FROM CENTER OF BASE OUTWARD

LEVELING SHIM DETAIL

LEVELING SHIMS ARE AVAILABLE IN A RANGE OF THICKNESSES FROM 1/16" (1.6), 1/8" (3.2), & 1/4" (6.3)

ANCHOR BOLT DETAIL

ANCHOR BOLT LOCATION DIMENSIONS AND DETAILS

1" (25.4) MAXIMUM LEVELING SHIM THICKNESS SEE NOTE 10

THE MAXIMUM THICKNESS OF ANY STACK OF SHIMS IS 1" (25.4)
SEE NOTES 9 & 10

ANCHOR DETAILS & SHIMMING

NOTICE OF CONFIDENTIAL INFORMATION

1. REMOVE ALL SHIM KITS & ENCLOSE IN A BAG EXCEPT FOR THE PLACEMENT OF LEVELING SHIM DETAIL.
2. INSTALL ADHESIVE SHEET TO BASE.
3. INSTALL AND SECURE MOUNTING SCREWS.
4. PLACE THE BASE ON THE SURFACE TO BE MOUNTED.
5. USE ADHESIVE SHEET TO SECURE BASE TO SURFACE.
6. LAY SHIM KITS ON THE BASE TO PROVIDE LEVELING.
# Lift Data Table

**Mohawk Resources, Ltd.**

**Parallelogram Lift Model 38-26-Surface**

<table>
<thead>
<tr>
<th>Lift Unit Data</th>
<th>--</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Load Capacity (lbs)</td>
<td>38,000 (17236 kg)</td>
</tr>
<tr>
<td>Anchor Bolt Diameter (in)</td>
<td>3/4&quot; (19)</td>
</tr>
<tr>
<td>Total Number of Anchor Bolts</td>
<td>48</td>
</tr>
<tr>
<td>Anchor Bolt Setting Torque</td>
<td>N/A -- See Anchor Details</td>
</tr>
<tr>
<td>Minimum Embedment Length (in)</td>
<td>3.00 (76)</td>
</tr>
<tr>
<td>Minimum Concrete Thickness (in)</td>
<td>6&quot; (152) On Grade (See Note 28)</td>
</tr>
</tbody>
</table>

## Required Material List

**Materials Shown on this List Shall be Used Without Substitution Unless Specifically Approved in Writing by Mohawk Resources, Ltd.**

<table>
<thead>
<tr>
<th>Item</th>
<th>Qty</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>1</td>
<td>Lockout/tagout Disconnect Box</td>
</tr>
<tr>
<td>11*</td>
<td>AR</td>
<td>Leveling Shims</td>
</tr>
<tr>
<td>10*</td>
<td>48</td>
<td>3/4&quot; (19) x 4&quot; (107) Anchor Bolt Assembly</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td>1&quot; (25.4) Seal Barrier</td>
</tr>
<tr>
<td>8</td>
<td>4</td>
<td>1-3/4&quot; (44) Reducer Bushing</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>1&quot; (25.4) SCH 40-80 Deg Elbow</td>
</tr>
<tr>
<td>6*</td>
<td>1</td>
<td>Junction Box (In Console)</td>
</tr>
<tr>
<td>5</td>
<td>AR</td>
<td>Sealit Flexible Conduit</td>
</tr>
<tr>
<td>4</td>
<td>AR</td>
<td>1&quot; (25.4) Rigid Conduit</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>Filter/Lubricator/Regulator, Dryer, Shut-off</td>
</tr>
<tr>
<td>2</td>
<td>AR</td>
<td>4&quot; (102) SCH 40 Street Elbow</td>
</tr>
<tr>
<td>1</td>
<td>AR</td>
<td>4&quot; (102) SCH 40 Pipe</td>
</tr>
</tbody>
</table>

* Items Supplied by Mohawk with the Lift Unit

---

### Electrical

- **Motor Horsepower**: 20
- **208/230 V 3 PH**
- **60 Ampere**
- **460 V 3 PH**
- **30 Ampere**
- **Control Circuit Transformer 1000 VA**
- **7.7 Amp**
- **24 Volt Power Supply**
- **4.8 Amp**
- **Light Fixtures (Optional Lighting Kit)**
- **6 Shop Air**

**Air Pressure**: 85 to 100 PSI (586 to 680 Psi)

**Air Volume - Lift (Locks)**: 5 CFM (.536 cfm/Min)

**Air Volume - Optional Rolling Jack (CFM)**: 25 each

**Air Volume - Optional Shop Air Kit (CFM)**: 20

**Air Volume - Total Req'd Capacity (CFM)**: 30 Minimum

**Air Volume - Total Req'd Capacity (CFM)**: 50 Suggested

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**Units**:

- **INCH (mm)**
- **POUNDS (kg)**
GENERAL NOTES

NOTE 1
If the existing concrete floor has a documented minimum strength of not less than F_{c} = 4,000 psi (27.6 MPa) and is at least 6 inches (152) thick, then the floor system may be used without alterations. Generally any floor area which is designed for vehicles of the same weight as the lift unit maximum capacity will be adequate for installation of the lift unit. Lift unit contact pressures will be equal to or less than the wheel contact pressures.

NOTE 2
If the concrete floor system does not meet minimum specifications of note 1 above, then a new concrete floor shall be installed to support the lift.

NOTE 3
If the strength of an existing floor system is unknown or not documented, its strength should be determined. Core samples should be taken to determine the strength of the floor.

NOTE 4
Any new concrete used for repairs or alterations to the floor system shall be at a minimum F_{c} = 4,000 psi (27.6 MPa), with heavy aggregate. For any new concrete it shall reach its full 28 day F_{c} strength before the lift and the anchor bolts are installed.

NOTE 5
Any new concrete used for floor repairs or alterations shall have reinforcing as required by the soil conditions and vehicle load level. The reinforcing shall be determined by others. At a minimum two layers of 6 x 6 10/16 welded wire fabric shall be used for any floor repairs. Also, floor repairs shall be doveled into the existing floor system to prevent differential settlement.

NOTE 6
For installation in existing structures, areas of the floor which are cut and removed for service conduit installations shall be repaired with concrete having minimum strength of not less than F_{c} = 4,000 psi (27.6 MPa), and is at least 9 inches (229) thick in the areas around and to the rear of the service legs.

NOTE 7
For new construction, the areas of the floor along the lift runways shall be deepened to 8 inches (229) for ease of anchor installation. Also, provide a minimum 9 inch (229) thickness around and to the rear of the service legs.

NOTE 8
For new construction where in floor radiant heating tubes are used, these tubes may be placed under the lift area provided the slab is cast sufficiently thick, a minimum of 8 inches (152) clearance should be provided for anchor bolts and drilling allowance. The installer must be notified that radiant tubes are used such that care is taken not to over drill the depth of the anchors.

NOTE 9
The support plates of the continuous base shall not be installed over a construction joint of the floor system. The support base plates shall not be placed nearer than 10 inches (254) to a construction joint or free edge of the floor slab.

NOTE 10
A maximum of one inch (25.4) anchor bolt shim thickness is permitted, individual anchor bolt shims are available in a range of thicknesses.

NOTE 11
Where more than one inch (25.4) of shim leveling is required full support plate contact shims are available at additional cost. The full contact shim plates shall then be accurately leveled using individual anchor bolt shims.

NOTE 12
In certain cases the floor slab may have adequate strength to support the lift unit but may not be thick enough to provide the minimum embedment depth for the anchor bolts. For this situation epoxy grouted anchor rods may be used. Contact Mohawk Resources, Ltd. for written approval of epoxy grouted anchor rods and procedures and approved materials for installing the lift unit.

NOTE 13
Except as described in note 7, no embedded plumbing, tubes, conduits or other items, except the lift unit service leg conduits shall be closer than 16 inches (406) from any anchor bolt. Also, the service leg conduits shall be installed accurately in the locations shown in the plan and detail views to minimize the effect on the anchorage.

NOTE 14
No anchor bolt shall be installed closer than 10 inches (254) from any free edge or floor joint.

NOTE 15
Provide two, 1 inch (102) SCH 40 PVC pipe as a hydraulic/pneumatic service supply conduit running from the power unit to each service leg.

NOTE 16
Provide 4, 1 inch (25.4) SCH 40 steel conduits as electrical service supply running from the power unit to the service legs. These conduits shall be installed as shown on the section views and must be installed according to applicable electrical codes.

NOTE 17
Provide temporary caps for all conduits and embedded pipes. It is recommended to leave pull ropes in conduits for ease of lift installation.

NOTE 18
The control console must be located in the vicinity of the lift. It should be placed far enough away from the lift to allow for activities around the lift. The enclosed drawings show the console in a standard position. The control console may be located on either side and anywhere along the length of the lift. Any deviations from the enclosed drawings may require longer cable, hoses, conduit, etc. Additional expense to the purchaser.

NOTE 19
The lift unit requires a high voltage power source. A lockout/tagout electrical disconnect box must be provided for the power source. The lockout/tagout disconnect box must be installed according to applicable electrical codes. This electrical disconnect is to be provided by others.

NOTE 20
Provide one, 1 inch (25.4) SCH 40 rigid steel conduit as electrical service supply running from the building power source to the control console. This conduit is shown underground. Alternatively it may be brought to the control panel overhead depending on customer preference. Provide a lockout/tagout electrical disconnect box within sight and as close to the control console as is practical. This electrical supply conduit and disconnect box must be installed according to local electrical code requirements.

NOTE 21
Provide one, 1 inch (25.4) SCH 40 rigid steel conduit as a compressed air supply. This conduit is shown underground. Alternatively it may be brought to the control panel overhead depending on customer preference. If brought overhead, provide flex conduit connecting the terminal end of the conduit to the control console.

NOTE 22
The lift unit requires clean dry compressed air at the pressure and volume shown on the lift unit data table. A filter/lubricator/regulator is supplied with the lift unit. The locking system only. A filter/lubricator/regulator, air dryer and shutoff valve must be provided for the lift unit to operate the optional accessories. The required volume of air shown in the lift unit data table recognizes that not more than one auxiliary air consumer will be used simultaneously.

NOTE 23
All floor requirements are based on a concrete slab that is on grade (supported by soil). Any other type of installation involving a slab not on grade (e.g., slab supported by piers, second story slab, etc.) must be reviewed & analyzed for suitability by the building inspector, at the expense of the owner.

SURFACE LIFTS ONLY

UNITS = INCH (mm)

D-size

NOTICE OF CONFIDENTIAL INFORMATION