DEPARTMENT OF BUILDING AND SAFETY
City of Los Angeles
Department of Building and Safety

## PLAN CHECK WORKSHEET FOR HYDRO-ELECTRIC ELEVATORS

| JOB ADDRESS: |  | ELEVATOR No: |
| :--- | :--- | :--- |
| PCIS \#:___-_ ______-_-_ |  |  |
| CONTRACTOR: | Licence \# | C11 |
| BTRC \#: | State Certification \# |  |
| Signature: | Date: |  |

The following information is necessary to check hydro-electric elevator plans. The information shall be shown on these worksheets and on the blue prints.

|  | INFORMATION | EXAMPLE | ACTUAL VALUE |
| :---: | :---: | :---: | :---: |
| GENERAL |  |  |  |
| H1 | Passenger or freight class of loading | Passenger |  |
| H2 | Rated speed | 100 fpm |  |
| H3 | Travel | 10 ft . |  |
| H4 | Is this a medical emergency elevator? | No |  |
| H5 | If no, is there a medical emergency elevator in this building? | Yes |  |
| H6 | Height of building ${ }^{1}$ | 20 ft . |  |
| H7 | Location of installation in relation to the plans and elevation of the building | See drawings |  |
| HOISTWAY ENCLOSURE |  |  |  |
| H8 | Number of elevators in the building | 2 |  |
| H9 | Number of cars in the hoistway | 1 |  |
| PITS |  |  |  |
| H10 | Bottom runby | 6 in. |  |
| H11 | Guards between adjacent pits | Only one pit |  |
| H12 | Horizontal refuge area | 24"X47" |  |

[^0]| INFORMATION |  | EXAMPLE | ACTUAL VALUE |
| :---: | :---: | :---: | :---: |
| H13 | Height of refuge area | 24 in. |  |
| H14 | Means to prevent the accumulation of water | N/A |  |
| CAR CLEARANCES |  |  |  |
| H15 | Bottom | 28 in. |  |
| H16 | Top | 53 in. |  |
| H17 | Top runby | 3 in . |  |
| REFUGE SPACE ON TOP OF CAR ENCLOSURE |  |  |  |
| H18 | Width | 24 in. |  |
| H19 | Depth | 33 in . |  |
| H20 | Height | 43 in. |  |
| MACHINE ROOM |  |  |  |
| H21 | Height | 7 ft |  |
| H22 | Disconnect switch in sight of motor | See layout |  |
| H23 | Work space for disconnect and controller | 18 inches |  |
| H24 | Hydro machinery work space | See layout |  |
| H25 | Manually operated shut off valve between hydraulic machine and hydraulic jack | See layout |  |
| CAR |  |  |  |
| H26 | Lining material | Cab 5-LA |  |
| H27 | Wall material | Cab 5-LA |  |
| H28 | Ceiling diffuser material | Cab 5-LA |  |
| H29 | Width, inside | 80 in . |  |
| H30 | Depth, inside | 51 in . |  |
| H31 | Weight, (car and accessories not including plunger) | 2,700 lb |  |
| H32 | Capacity (rated load) | 2,500 lb |  |
| H33 | Width of door | 42 in. |  |
| H34 | Single door, center opening doors, or multi-speed doors | Single door |  |
| H35 | Hoistway door weight | 250 lb |  |
| H36 | Car door weight | 250 lb |  |
| H37 | Door travel time | 3.4 seconds |  |


|  | INFORMATION | EXAMPLE | ACTUAL VALUE |
| :---: | :---: | :---: | :---: |
| STILES |  |  |  |
| H38 | Steel | C5X6.7 |  |
| H39 | Free length of styles (distance between cross head and plank) | 7 ft |  |
| H4O | Vertical center distance between upper and lower guide shoes (or rollers) | 8 ft |  |
| PLANK |  |  |  |
| H41 | Steel | C5 $\times 8.2$ |  |
| CROSSHEAD |  |  |  |
| H42 | Steel | C5 $\times 6.7$ |  |
| H43 | Distance equipment projects above top of crosshead | 18 inches |  |
| CAR BUFFERS |  |  |  |
| H44 | Type (oil or spring) | Spring |  |
| H45 | Make | ABC |  |
| H46 | Model | H102 |  |
| H47 | State approval | 12345 |  |
| H48 | Capacity | 7,000 lb |  |
| H49 | Stroke | 3 in. |  |
| H50 | No. of buffers (Show on layout) | 2 |  |
| GUIDE RAILS |  |  |  |
| H51 | Rail size | 15 lb. |  |
| H52 | Fishplate thickness (if other than a plate, provide detail and moment of inertia calculations. A piece of rail of the same weight as the main rail is acceptable) | 2114/ inches |  |
| RAIL BRACKETS |  |  |  |
| H53 | Maximum vertical distance between rail brackets | 144 in. |  |
| H54 | Design details | $\begin{gathered} \text { See drawing RB } \\ 26 \end{gathered}$ |  |
| PUMP AND TANK |  |  |  |
| H55 | Weight | 2,000 \# |  |
| H56 | Location (distance between closer floor bolts) | $34 \mathrm{in}$. |  |
| H57 | Height to center of gravity | 58 in. |  |


| INFORMATION |  | EXAMPLE | ACTUAL VALUE |
| :---: | :---: | :---: | :---: |
| H58 | Type and number of floor bolts | "Red Head" Selfdrill, 4 |  |
| H59 | Floor bolt, size and minimum embedment | $1 / 2$ in. $X 6$ in. 5 in . embedment |  |
| PRESSURE |  |  |  |
| H60 | Maximum working pressure | 350 psi |  |
| H61 | Relief vale set pressure | 525 psi |  |
| PLUNGER |  |  |  |
| H62 | Inside diameter | 3.813 |  |
| H63 | Outside diameter | $43 / 8$ in. |  |
| H64 | Free length | 14 ft .6 in. |  |
| H65 | Wall thickness | 0.281 in. |  |
| H66 | Head thickness | 0.750 in. |  |
| H67 | Shape of head | Flat |  |
| H68 | Inside diameter of skirt or radius of curvature of head (drawing required) | Head is not dished |  |
| H69 | Material | Carbon Steel AISE 1026 cold drawn |  |
| H70 | Yield point (based on 2\% proof yield stress point) | 60,000 psi |  |
| H71 | Percent Elongation | 15\% |  |
| CYLINDER |  |  |  |
| H72 | Is the cylinder installed below ground? | Yes |  |
| H73 | If yes, what type of protection from corrosion is provided? | Protective plastic Casing |  |
| H74 | Inside diameter | 6.065 in. |  |
| H75 | Outside diameter | 6.625 in. |  |
| H76 | Wall thickness | 0.280 in . |  |
| H77 | Head thickness | 0.750 in . |  |
| H78 | Shape of head | Flat |  |
| H79 | Inside diameter of skirt or radius of curvature of head (drawing required) | Head is not dished |  |
| H80 | Safety bulkhead (detail required) | See drawing SP2 |  |


| INFORMATION | EXAMPLE | ACTUAL VALUE |  |
| :--- | :--- | :---: | :---: |
| H81 | Material | Carbon Steel <br> AISE 1026 cold <br> drawn |  |
| H82 | Yield point (based on 2\% proof yield point) | 60,000 psi |  |
| H83 | Percent elongation | 60,000 psi |  |
|  | PIPING |  |  |
| H84 | Nominal size | Schedule 40 |  |
| H85 | Schedule or type | Galvanized iron |  |
| H86 | Material |  |  |
| H87 | Inside diameter ${ }^{2}$ |  |  |
| H88 | Outside diameter ${ }^{2}$ |  |  |
| H89 | Wall thickness ${ }^{2}$ |  |  |
| H90 | Yield stress ${ }^{2}$ |  |  |
| H91 | Percent elongation ${ }^{2}$ |  |  |

[^1]
[^0]:    ${ }^{1}$ For high-rise buildings submit calculations to verify that the anchorage of drive and suspension system conforms to Section 91.403.10; 91.1626; and 91.1632.2 of the Los Angeles Building Code. ASME A17.1 Rules 2401.1; 2401.3; and 2401.4

[^1]:    ${ }^{2}$ If other than standard ASA B36.10 and ANSI B16.25 steel pipes or ASTM B88 copper tubes.

