COMMERCIAL ELEVATOR / ESCALATOR / DUMBWAITER / VERTICAL PLATFORM LIFT / INCLINED PLATFORM LIFT / MATERIAL LIFT / LULA / "CONVEYANCE" PLAN REVIEW REQUIREMENTS

ADOPTED CODES EFFECTIVE 1/1/2022:

- ASME A17.1 2019 Safety Code for Elevators and Escalators
- ASME A18.1 2017 Safety Standards for Vertical Platform Lifts and Stairway Chairlifts
- ASME A17.3 2005 Safety Code for Existing Elevators and Escalators

ALL PLANS REQUIRE:

- Compliance with the currently adopted ASME A17.1 Safety Code for Elevators and Escalators and/or ASME A18.1 Safety Standard for Platform Lifts and Stairway Chairlifts (whichever is applicable)
- Site specific shop drawings and submittals for each conveyance being installed
- Conveyance shop drawings and submittals appropriately indexed in plan directory
- Integration of all conveyance shop drawings and submittal information, layout, dimensions, and notes into all areas of plan as required by Code
- Deferred conveyance shop drawings and submittals not allowed

STRUCTURAL AND ARCHITECTURAL SPECIFIC TO CONVEYANCES

- Pit and Hoistway construction details from top and elevation views for each conveyance being installed
- Designation of Machine Room(s) or Control Room(s) for each conveyance being installed (if applicable)
- Details and specific locations for Sump Pump Pit(s) (required on all conveyances w/ Fire Fighters Service Operation except Escalators, Dumbwaiters, Vertical Platform Lifts, Inclined Platform Lifts, LULA's and Material Lifts)
- Sump Pump Pit location(s) must match conveyance equipment layout on shop drawings and submittals

MECHANICAL INSTALLATIONS SPECIFIC TO CONVEYANCES

- Natural or Mechanical means shall be provided to keep ambient air temperature and humidity within the range specified by the conveyance equipment manufacturer for equipment installed in Machine Rooms, Control Rooms, or inside hoistway.
- HVAC equipment location(s) in relation to Machine Room(s) and/or Control Room(s) conveyance equipment (if applicable)
- Mechanical installations cannot be located over any conveyance equipment or inside hoistway
- The hoistway for the machineroom-less traction elevator is considered the Machine/Control Space. See 2015 IBC 3005.2 and ASME A17.1-2019 2.7.9.2 in addition to manufacturer's submittal requirements for hoistway ventilation.

Contact Elevator Plan Review at 719-327-2996 for clarification or additional information

MECHANICAL INSTALLATIONS SPECIFIC TO CONVEYANCES (CONT)

Note: If Hoistway temperature control is going to be achieved via roof set exhaust fan, the exhaust fan must include a motorized damper that will return to a closed position in the event of power loss, and operate by means of a hoistway mounted temperature control. Electrical power to the exhaust fan and motorized damper shall be interrupted in the event of any fire alarm initiating device per the AHJ and the local Fire Inspection Authority.

PLUMBING INSTALLATIONS SPECIFIC TO CONVEYANCES

- Minimum Sump Pump rating is 50 GPM per conveyance where required (a single pump is allowed for multiple elevators that share a common elevator pit. Minimum pump rating shall be multiplied by elevators served. Elevator pit floor shall slope towards Sump)
- Provide Sump Pump piping schematics throughout building
- Sump Pump Discharge Piping required to terminate indirectly into sanitary waste
- Waste receptor must be sized to accept Sump Pump GPM Discharge per IPC 709.3 and IPC Table 710.1
- Required Sand/Oil Interceptor or Oil Detection Type Control and Alarm for Sump Pumps installed in conjunction with Hydraulic Elevators
- Oil Detection Control and Alarm Panel must be mounted in Conveyance Machine Room, or hoistway (where applicable)
- Plumbing systems or components not allowed in conveyance Machine Room(s) or Control Room(s)

ELECTRICAL INSTALLATIONS SPECIFIC TO CONVEYANCES

For exact electrical plan requirements, See: https://www.pprbd.org/File/Resources/Downloads/CommercialHandout/Com%20Elect%20reqs%202020%20NEC.pdf .

- The hoistway for a machineroom-less traction elevator is considered the Machine/Control Space, all branch circuits within the hoistway shall be individual circuits. See 2020 NFPA 70 620.22 thru 620.25
- An additional Non-Fused main disconnect is required within the hoistway adjacent to the drive machine. See 2020 NFPA 70 620.51(C)(1)
- An additional Fused 110v Cab circuit disconnect is required within the hoistway adjacent to drive machine. See 2020 NFPA 70 620.22
- Locations of Disconnecting Means for all conveyance related circuits in relation to shop drawings, submittals, and NEC
- Pit and hoistway lighting fixture, illumination and receptacle requirements per conveyance shop drawings and submittals, NEC and ASME Codes
- When Elevator Pits are required have a fire sprinkler installed, All electrical devices are to be mounted 30” AFF or be NEMA 4 or 4X.
- Shunt Trip Disconnecting Means is prohibited in this jurisdiction, but is allowed on a case-by-case basis, mostly pertaining to particular occupancies.
- See NFPA 72, Section 21.3 thru 21.3.13.3, and ASME A17.1-2019, Section 2.27.3.2, for fire alarm initiating device requirements and exceptions.