

**SUPPLEMENTAL CORRECTION SHEET
FOR
CABLE ELEVATORS
2011**

This is intended to provide uniform application of the codes by the plan check staff and to help the public apply the codes correctly.

PLAN DETAILS

- 1. Indicate the length of the bottom runby. (ASME A17.1 Rule 107.1b; 107.1c & 107.1 d)
- 2. Provide guards between adjacent pits.(ASME A17.1 Rule 106.1c)
- 3. Show the height of travel.
- 4. Show horizontal refuge area on the bottom of the pit.(ASME A17.1 Rule 107.1a)
- 5. Show height of refuge area on the bottom of the pit. (ASME A17.1 Rule 107.1a)
- 6. Show means to prevent accumulation of water in the pit. (ASME A17.1 Rule 106b(3) and 106b(4))
- 7. Show bottom car clearance. (ASME A17.1 Rule 107.1a)
- 8. Show top car clearance. (ASME A17.1 Rule 107.1e and 107.1f)
- 9. Show horizontal refuge area above the car enclosure. (ASME A17.1 Rule 107.1k)
- 10. Show height of refuge area above the car enclosure. (ASME A17.1 Rule 107.1k)
- 11. Show location of electric disconnect switch. (NEC 620-51(c))
- 12. Show work space for controller (18 in. minimum) (NEC 620-5; 110-16)
- 13. Show the dimension of the inside width of the car. (Title 8 § 3041(e); ASME A17.1 Rule 1300.1)
- 14. Show the dimension of the inside depth of the car. (Title 8 § 3041(e); ASME A17.1 Rule 1300.1)
- 15. Show the dimensions of the car door. (Title 8 § 3041(e))
- 16. Show the buffers. (ASME A17.1 Rule 201.1a; 201.3b; 201.4j)
- 17. Provide a design detail of the rail brackets. (ASME A17.1 Rule 2005.b; 2403.7)
- 18. Show spacing of rail brackets. (ASME A17.1 Fig. 200.4a(1))
- 19. Show location of tiebrackets. (ASME A17.1 Fig. 2403.2)
- 20. Show roping system. (ASME A17.1 Rule 212.3)

- 21. Show the clearance between the car and the counterweight assembly. (ASME A17.1 Fig. 2402.1a)
- 22. Show the clearance between the counterweight assembly and the hoystway enclosure or separator beams. (ASME A17.1 Fig. 2402.1a)

CALCULATIONS

- 1. If this is a high-rise building, submit calculations to verify that the anchorage of drive and suspension systems conform to Section 91.403.10; 91.1632.2 of the Los Angeles Building Code.
- 2. Provide seismic calculations for the car rail brackets. They shall be designed to withstand the force imposed by the weight of the car, plus 40% the rated load when subject to a horizontal seismic force of 0.5 gravity or the force calculated in accordance with Section 9.403.10; 91.1632.2 of the Los Angeles Building Code, which ever is greater. Furthermore, the calculations shall show that the deflection does not exceed $\frac{1}{8}$ of an inch. (ASME A17.1 Fig. 2005.b)
- 3. Calculate the factor of safety of ropes. (ASME A17.1 Rule 212.3)
- 4. Provide seismic calculations for the anchorage of the controller in accordance with Section 9.403.10; 91.1632.2 of the Los Angeles Building Code.
- 5. Provide calculations for the sheaves. The factor of safety, based on the ultimate strength of the material shall be 8 for steel and bronze, and 10 for cast iron. (ASME A17.1 Rule 208.3)
- 6. Provide calculations for the sheave fastening to the building. (ASME A17.1 Rule 105.3)
- 7. Provide calculations for the sheave beams. Stresses shall not exceed 80% of those permitted by AISC Specifications for Design, Fabrication and Erection of Structural Steel for Buildings. The deflection shall not exceed $\frac{1}{1666}$ of the span. (ASME A17.1 Rule 105.4)
- 8. Provide calculations for the machine beams. Stresses shall not exceed 80% of those permitted by AISC Specifications for Design, Fabrication and Erection of Structural Steel for Buildings. The deflection shall not exceed $\frac{1}{1666}$ of the span. (ASME A17.1 Rule 105.4)

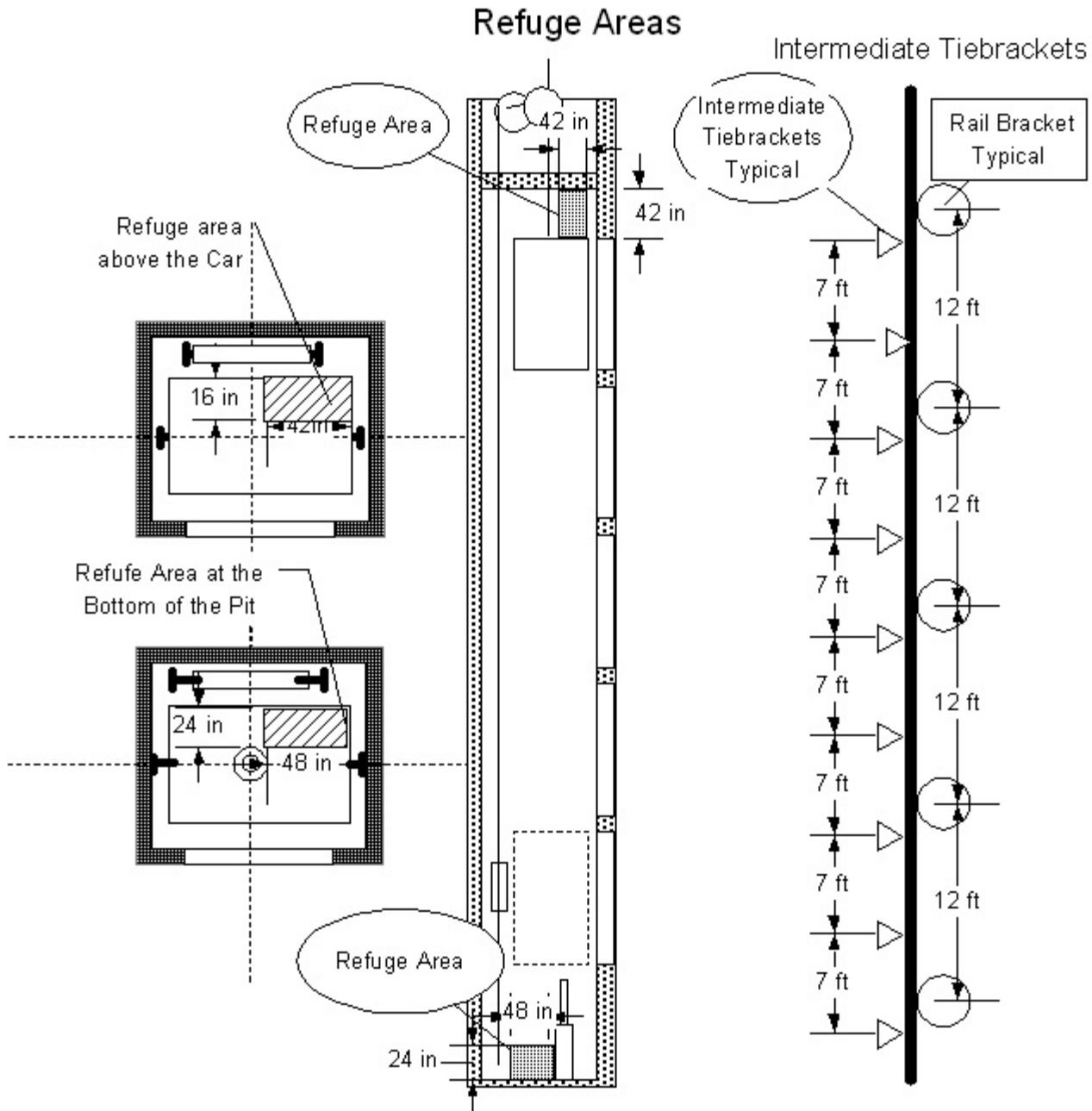
NOTES ON PLANS

- 1. State whether the elevator is for passengers or for freight. (ASME A17.1 Rule 214.1)
- 2. State class of loading for freight elevators. (ASME A17.1 Rule 207.2b)
- 3. State rated speed. (ASME A17.1 Rule 212.3; 201.3a; 201.4a)
- 4. State the height of the building.
- 5. Is this a medical emergency elevator? (Title 8 § 3031e)
- 6. If this is not a medical emergency elevator, is there a medical emergency elevator in this building? (Title 8 § 3031e)

- 7. State height of machinery room. (ASME A17.1 Rule 101.4)
- 8. State the weight of the car.
- 9. State the rated load of the car. (ASME A17.1 Rule 207.0a; 13001)
- 10. Is the car door single door or a center opening door? (Title 8 § 3022.(d)(1))
- 11. State the weights of hoistway door and the car door.(Title 8 § 3022.(d)(1))
- 12. State the door travel time. (Title 8 § 3022.(d)(1))
- 13. State the type of buffers (oil or spring) (ASME A17.1 Rule 201.3a; 201.3b)
- 14. State the make and model of the buffers. (Title 8 § 3108 (f) and 3121.1)
- 15. State the capacity of the buffers. (ASME A17.1 Rule 201.3b; 201.4j)
- 16. State the buffer stroke. (ASME A17.1 Rule 201.3a; 201.3b)
- 17. State the size of the car guide rails. (ASME A17.1 Fig. 200.4a(1); 200.4a(2))
- 18. State the thickness of the fishplates that connect the rails. (ASME A17.1 Rule 2403.6(5))
- 19. State the vertical maximum distance between car rail brackets. (ASME A17.1 Rule 2005.b)
- 20. State the vertical maximum distance between counter weight rail brackets. (ASME A17.1 Fig. 2403.2)
- 21. State distance of intermediate tiebrackets for the counterweight rails.
- 22. State type and size of car ropes. (ASME A17.1 Fig. 2403.2)
- 23. State number of car ropes. (ASME A17.1 Rule 212.4)
- 24. State car roping ratio. (ASME A17.1 Rule 212.3)
- 25. State maximum braking strength of one car rope. (ASME A17.1 Rule 212.3)
- 26. State type and size of counterweight ropes. (ASME A17.1 Rule 214.4)
- 27. State number of counterweight ropes. (ASME A17.1 Rule 214.4)
- 28. State counterweight roping ratio. (ASME A17.1 Rule 212.3)
- 29. Is there usable space below the pit? (ASME A17.1 Rule 109.1(a))
- 30. State number and type of car safeties. (ASME A17.1 Rule 205.1; 205.2)
- 31. State model and manufacturer of car safeties. (Title 8 § 3035)
- 32. What is the state approval number of the car safeties? (Title 8 § 3035)
- 33. State number and type of counterweight safeties (Required only if there is usable space below the pit). (ASME A17.1 Rule 109.1(a))
- 34. State model and manufacturer of counterweight safeties (Required only if there is usable

space below the pit). (Title 8 § 3035)

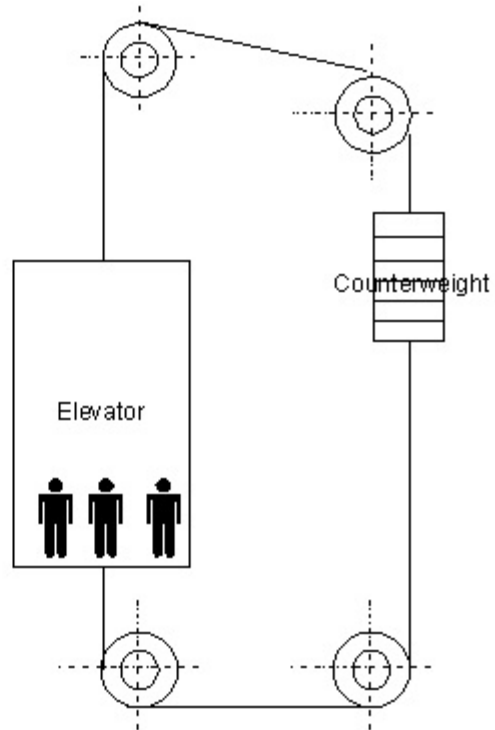
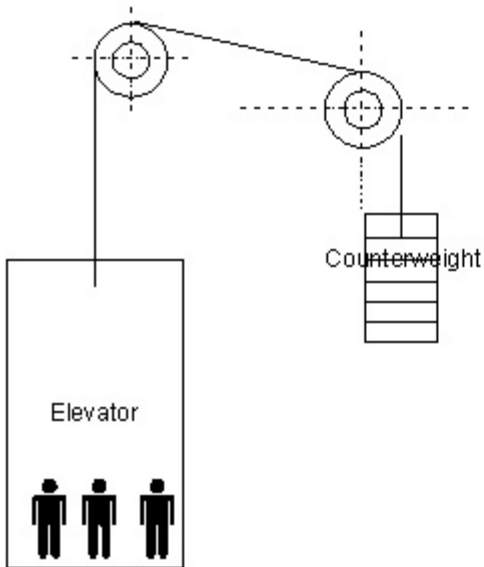
- 35. What is the state approval number of the counterweight safeties? (Required only if there is usable space below the pit). (Title 8 § 3035)



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The following are design examples:

Roping System
1:1



Roping System 2:1

