When exterior emergency escape and rescue opening are required by code, they shall be accessible by ladders as follows:

1. Provide straight access (compliant stairs may be used); 6’ wide to court(s) harboring rescue windows. Illustrate that a 35-foot extension ladder folded to its carrying size of 14’-0” long by 2’-36” wide by 1’-0” thick, carried by a 3-person team can be maneuvered into all locations, with rescue windows.

2. All rescue windows must be accessible. A stable, slip resistant, level fire ladder location (pad) capable of supporting the weight of the ladder, the firefighter in gear, equipment, and the person to be rescued (no less than 1,000 pounds total). Pads may be of grass, gravel or other permeable materials capable of supporting the ladder without slipping. This fire ladder pad shall be no less than 6’-0” by 7’-0” deep and shall allow the unobstructed raising of the ladder free of overhead obstacles. The extended ladder angle must be at least 70° from horizontal or 4:1 slope unless otherwise approved. Provide elevation and plan views with ladder details. See attached details.

3. The installed fire ladder pads shall be permanently marked, “Fire Ladder Pad”.

1104.16 Fire escape stairways. Fire escape stairways shall comply with Sections 1104.16.1 through 1104.16.7.

1104.16.1 Existing means of egress. Fire escape stairways shall be permitted in existing buildings but shall not constitute more than 50 percent of the required exit capacity.

1104.16.2 Protection of openings. Openings within 10 feet (3048 mm) of fire escape stairways shall be protected by opening protectives having a minimum ¾ hour fire protection rating.

   Exception: In buildings equipped throughout with an approved automatic sprinkler system, opening protection is not required.

1104.16.3 Dimensions. Fire escape stairways shall meet the minimum width, capacity, riser height and tread depth as specified in Section 1104.10.

1104.16.4 Access. Access to a fire escape stairway from a corridor shall not be through an intervening room. Access to a fire escape stairway shall be from a door or window meeting the criteria of Section 1005.1. Access to a fire escape stairway shall be directly to a balcony, landing or platform. These shall not be higher than the floor or window sill level and not lower than 8 inches (203 mm) below the floor level or 18 inches (457 mm) below the window sill.

1104.16.5 Materials and strength. Components of fire escape stairways shall be constructed on noncombustible materials. Fire escape stairways and balconies shall support the dead load plus a live load of not less than 100 pounds per square foot (4.78 kN/m). Fire escape stairways and balconies shall be provided with a top and intermediate handrail on each side.
1104.16.5.1 Examination. Fire escape stairways and balconies shall be examined for structural adequacy and safety in accordance with Section 1104.16.5 by a registered design professional or others acceptable to the fire code official every 5 years, or as required by the fire code official. An inspection report shall be submitted to the fire code official after such examination.

1104.16.6 Termination. The lowest balcony shall not be more than 18 feet (5486 mm) from the ground. Fire escape stairways shall extend to the ground or be provided with counterbalanced stairs reaching the ground.

   Exception: For fire escape stairways serving 10 or fewer occupants, an approved fire escape ladder is allowed to serve as the termination.

1104.16.7 Maintenance. Fire escape stairways shall be kept clear and unobstructed at all times and shall be maintained in good working order.
Approved by:

Ray Iverson
Deputy Fire Chief