

# Cost Segregation and Roof Replacement

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What may seem like an easy question, could take a lot of research to get the right answer. A client recently inquired about the depreciation on a partially replaced roof. The answer looks simple, but there were many tax laws to consider.

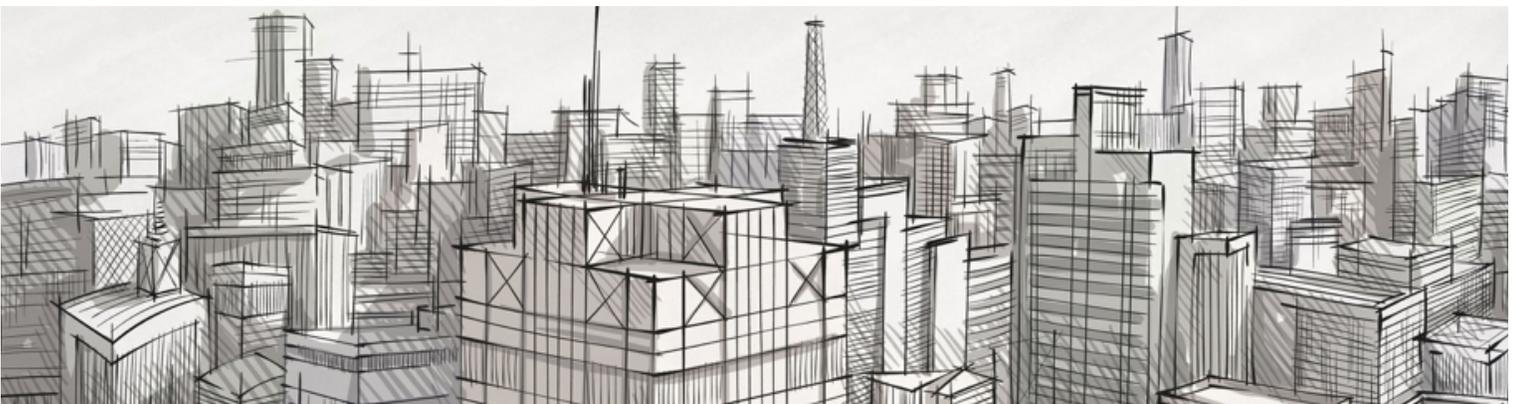
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## The Answer

You will need to have the entire roof area of the building surveyed to determine the total square footage, and then you will need to determine the ratio of the replaced plaza deck to that total square footage.

If you find that  $1/3$  or less of the total square footage of the entire roof area has been affected by the replacement, then you should be able to expense the cost of the replacement decking/roofing - as well as the related demolition of the old deck system. But do not take a partial disposition for the demolished decking.

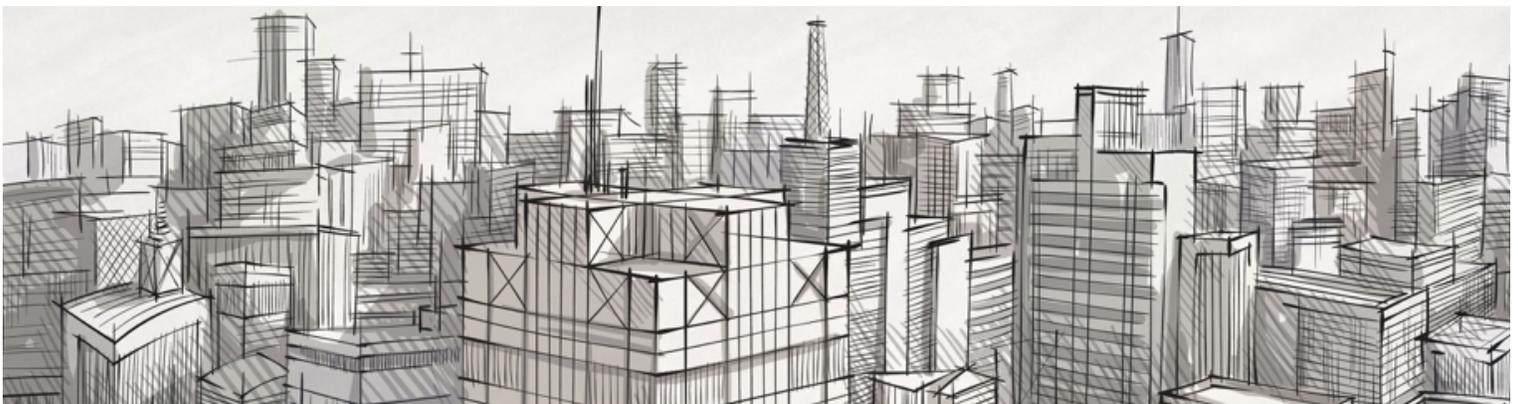
If you find that more than  $1/3$  of the total square footage of the entire roof area has been replaced, then capitalize the costs of the replacement decking, and take a partial disposition for the demolished decking. Then expense the costs of the demolition of the old decking per 1.263(a)-3(g)(2)(i). You would capitalize the replacement decking/roofing as a 39-yr asset subject to straight-line depreciation and the mid-month convention.



## The Research and Notes Used to Validate the Answer

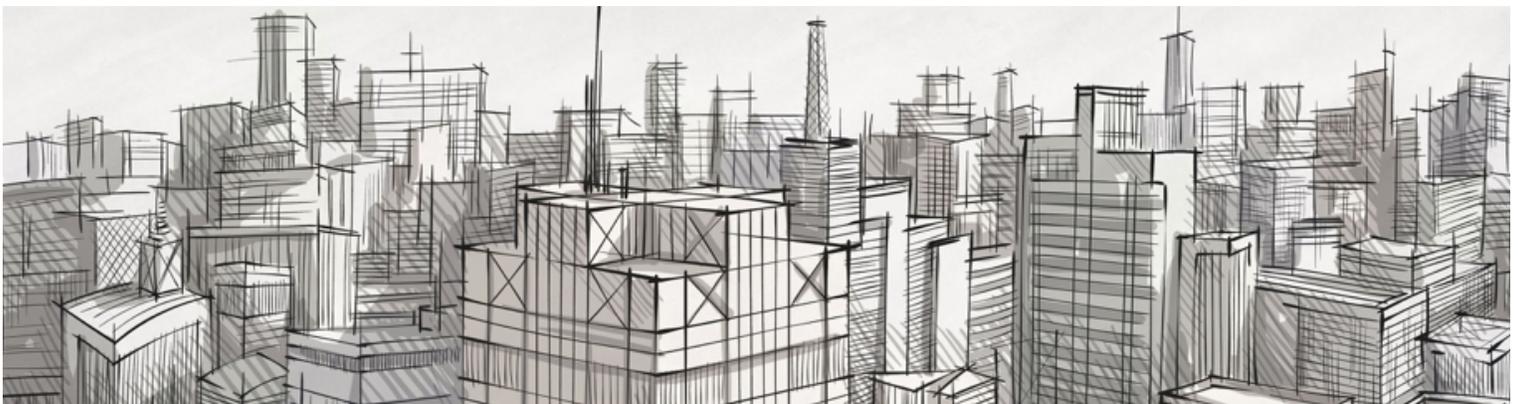
### Research:

- a. 1.263(a)-3(e)(2)(i) - the building & its structural components (as defined @ 1.48-1(e)(2)) is a single unit of property
  - i. The patio decking, insulation, waterproofing, and drainage layers are not a separate building system under 1.263(a)-3(e)(2)(ii)(B), and therefore, all are part of the building structure under 1.263(a)-3(e)(2)(ii)(A)
- b. Under 1.263(a)-3(e)(2)(ii), the **betterment, restoration, or adaptation** "improvement" analysis will be applied to the building structure as a whole
- c. The replacement of the patio decking, insulation, waterproofing, and drainage layers is not a "**betterment**" under 1.263(a)-3(j)(1)(i)-(iii) b/c the replacement does not ameliorate a material condition or defect that existed prior to the taxpayer's acquisition of the unit of property (or in this case, the building structure; see "b" above), or that arose during the production of the unit of property; is not for a material addition (physical enlargement, expansion, extension, or addition of a major component) to the unit of property, or a material increase in the capacity (includes the addition of cubic or linear space) of the unity of property; and is not reasonably expected to materially increase the productivity, efficiency, strength, quality, or output of the unit of property.
- d. 1.263(a)-3(k)(iv)-(vi) - **Restorations**
  - i. (iv): Returns the unit of property to its ordinarily efficient operating condition if the property has deteriorated to a state of disrepair and is no longer functional for its intended use.
    1. The entire building is the unit of property, but the improvement analysis is applied to the building structure. The leaky patio/roof is not deterioration that has caused a state of disrepair that would render the building structure as no longer functional for its intended use.
      - a. Proof - there are tenants in the building, and the structure is not in danger of collapse.
    - ii. (v): Results in the rebuilding of the unit of property to a like-new condition after the end of its class life.
      1. The entire building is the unit of property, but the improvement analysis is applied to the building structure. Under 1.263(a)-3(k)(5), a unit of property is rebuilt to a like-new condition if it is brought to the status of new, rebuilt, remanufactured, or a similar status under the terms of any

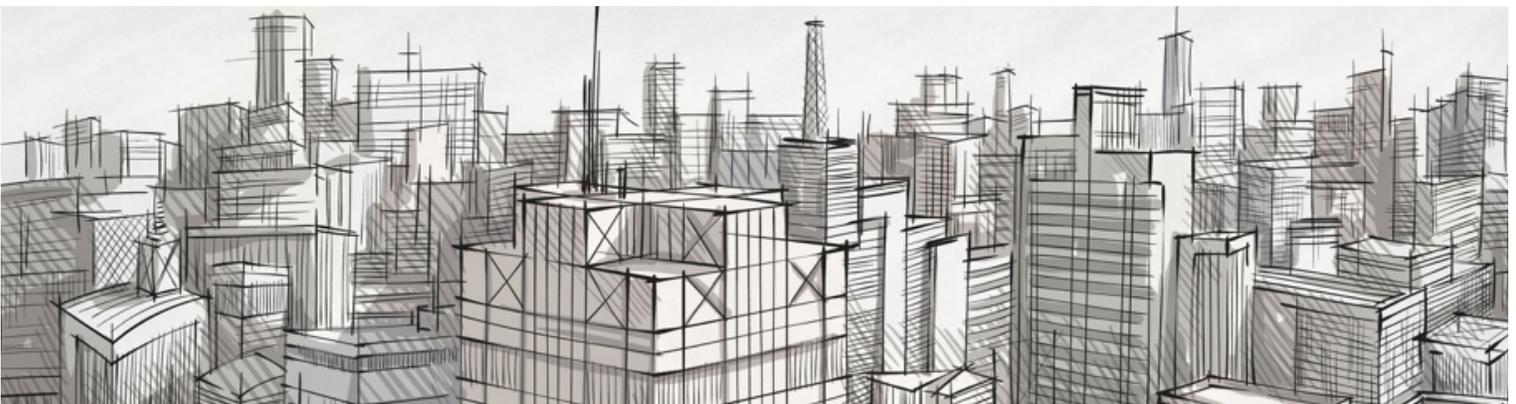


federal regulatory guideline or the manufacturer's original specifications. Generally, a comprehensive maintenance program, even though substantial, does not return a unit of property to a like-new condition.

- a. While this definition doesn't seem to be the most helpful in regards to a building structure (which doesn't have any sort of federal regulatory guidance or manufacture's original specifications that I can think of), I feel it is safe to assume that the replacement of the patio decking, insulation, waterproofing, and drainage layers, for what is functionally part of the roof of the building, does not qualify as rebuilding the entire building structure to a like-new condition.
- b. Additionally, such rebuilding would have to occur after the end of the building's class life. Per 1.263(a)-3(i)(4), the class life of a unit of property is the recovery period prescribed for the property under 168(g)(2) & (3) for purposes of the alternative depreciation system. Under 168(g)(2)(C)(iii), nonresidential real property has a recovery period of 40 years.
- iii. (vi): Is for the replacement of a part or combination of parts that comprise a major component or a substantial structural part of a unit of property.
  1. 1.263(a)-3(k)(6)(i)(A) - A major component is a part or combination of parts that **performs a discrete and critical function** in the operation of the unit of property.
    - a. The patio area is the functional equivalent of the roof of the building. The roof of a building is a major component of a building (the unit of property) because it performs the discrete and critical function of protecting the interior of the building from the elements, as well as providing structural support for the entire building.
      - i. See 1.263(a)-3(k)(7), Ex. 5(ii): "the roof structure constitutes a major component and a substantial structural part of the building unit of property."
      - ii. See 1.263(a)-3(k)(7), Ex. 14: Because the entire roof performs a discrete and critical function in the building structure, the roof comprises a major component of the building structure under paragraph (k)(6)(ii)(A). In addition, because the roof comprises a large portion of the physical structure of the building structure, the

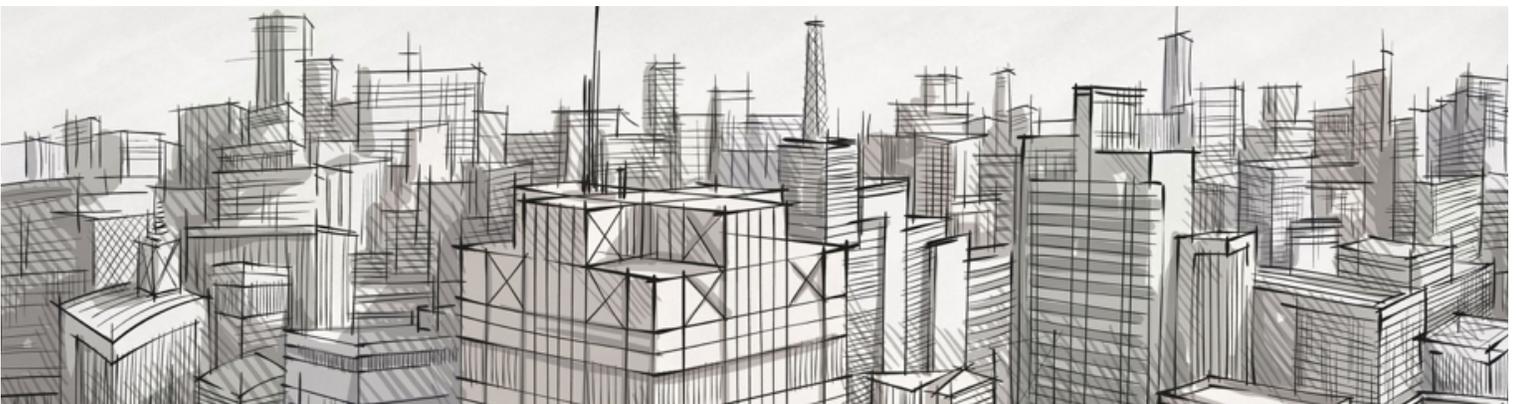


- roof comprises a substantial structural part of the building structure under paragraph (k)(6)(ii)(B).
2. 1.263(a)-3(k)(6)(i)(B) - A substantial structural part is a part or combination of parts that **comprises a large portion of the physical structure** of the unit of property.
    - a. I have plans that show the area of the plaza deck system to be approximately 15,800 sq. ft., of which, 14,000 sq. ft. have been or will be replaced.
    - b. I do not have plans that show the area of the roof area that covers the top floor(s) of the building (there are at least two more levels to the roof). The top two levels of the roof appear to be from 1.5 to 2 times the size of the plaza deck area.
  3. 1.263(a)-3(k)(6)(ii) - In the case of a building, an amount is for the replacement of a major component or a substantial structural part of the building unit of property if—
    - a. (A) - The replacement includes a part or combination of parts that comprise a major component, or a **significant portion of a major component**, or
    - b. (B) - The replacement includes a part or combination of parts that comprises a **large portion of the physical structure**.
  4. Per Example 14 at 1.263(a)-3(k)(7), we know that the replacement of the entire roof would constitute the replacement of both a major component and substantial structural part of the building structure. However, here we are dealing with the replacement of approximately 29-35% of the total roofing surface (if my assumption that the other two roof decks are between 1.5 and 2 times the area of the plaza deck).
    - a.  $14,000/(15,800*2.5) = 0.35$
    - b.  $14,000/(15,800*3) = 0.29$
  5. So, the question is whether or not the replacement of 29-35% of the roof constitutes a significant portion of a major component or a large portion of the physical structure.
    - a. 1.263(a)-3(k)(7), Ex. 16 provides that 1/3 of a building's furnaces (the furnaces are a major component of the HVAC building system) does not constitute a significant portion of a major component, or a substantial structural part of the HVAC system. Ex. 18 provides similar guidance, in that 30% of the roof-mounted HVAC units are not a significant portion of a major component, or a substantial



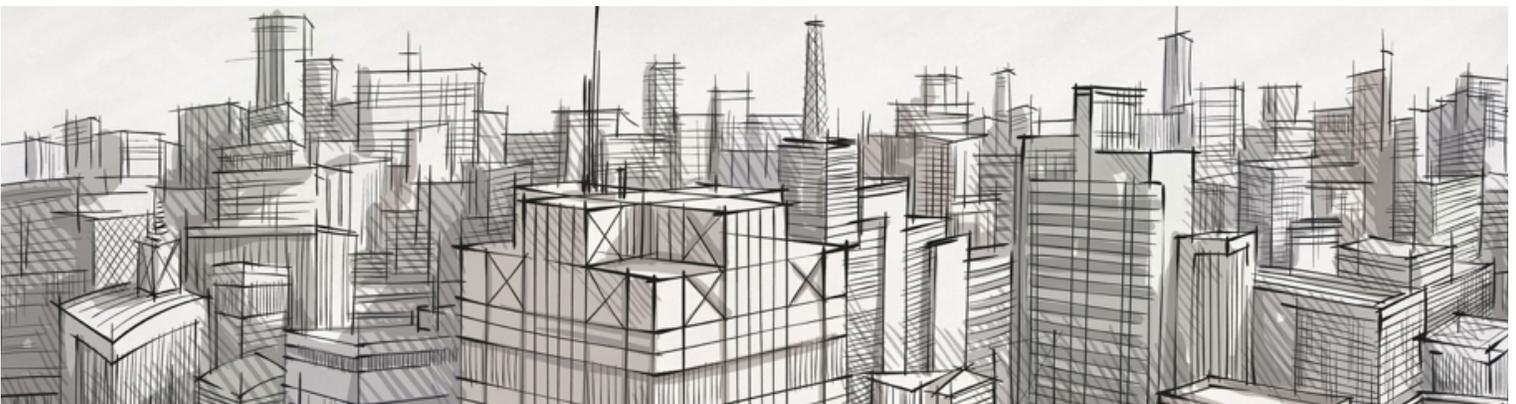
structural part of the HVAC system. Ex. 21 also provides that 30% of the electrical wiring in a building does not constitute a significant portion of a major component, nor a substantial structural part of a building system.

- b. Ex. 23, dealing with the replacement of bathroom sinks, holds that the replacement of 40% of the total bathroom sinks (the bathroom sinks are a major component of the plumbing building system) does not constitute the replacement of a significant portion of a major component of the plumbing system, nor a substantial structural part of the plumbing system. However, see Ex. 29, where the replacement of 40% of the flooring in a building was held to constitute a significant portion of a major component (all the flooring in the building) of the building structure.
- c. Examples 25, 26 & 27 are perhaps the most applicable to this situation. All three deal with the replacement of windows in a building, which, like the roof, are a major component of the building structure for purposes of the improvement analysis. In Ex. 25, the replacement of 1/3 of the windows in a building, where all of the windows together represent 25% of the total surface area of the building structure (presumably the exterior of the structure), was held not to be a restoration/improvement to the building structure because 1/3 of the windows did not constitute a significant portion of a major component, or a large enough portion of the physical structure (approx. 8.34% of the exterior surface area of the exterior building structure;  $1/3 * .25 = 0.0833$ ). Ex. 26 assumes the same facts, except that 2/3 of the windows are replaced. The replacement of 2/3 of a major component is held to be a significant portion of that major component. It is not discussed whether the replacement of windows representing approx. 16.67% of the exterior surface area of the exterior building structure would be deemed to constitute a large enough portion of the physical structure to rise to the level of a substantial structural part of the building structure. Finally, Ex. 27 assumes the same facts as Ex. 25 (i.e., 1/3 of the windows are replaced) except that now the windows comprise 90 of the total exterior surface area of the building. Once again, the replacement of 1/3 of a major component is determined not to constitute a significant portion of a major component of the



building structure. However, they were held to comprise the replacement of a substantial structural part of the building structure, so the replacement of 30% ( $1/3 * 90\% = 0.3$ ) of the surface area of the exterior of the building structure is considered to be an improvement.

- d. Based on the foregoing examples, **I believe that it is highly unlikely that the IRS would consider the replacement of 29-35% of the roofing surface to be a large enough portion of the exterior physical structure of the building to rise to the level of a substantial structural part.** When counting the total exterior surface area of the building, the replacement of approximately 1/3 of the roofing surface is unlikely to rise to the level of 30% or more of the total exterior surface. However, it is possible that the IRS could argue that anything over 8.34% of the total exterior surface area rises to the level of a substantial structural part of the building structure.
- e. The question of whether or not the replacement of the plaza deck rises to the level of a significant portion of a major component is a much closer question. While Ex. 23 held that the replacement of 40% of the components that comprise a major component was not the replacement of a significant portion of a major component, Ex. 29 contradicts it, so in my opinion, 40% is too high of a percentage to provide any reasonably level of certainty. Examples 16, 25, & 27 all hold that the replacement of 1/3 of the components that together constitute a major component of the building structure do not rise to the level of a significant portion of that major component. Therefore, I feel very comfortable using 1/3 as the cutoff.
- f. Here, the client is replacing components that may exceed this threshold. **Accordingly, my advice is to survey the surface area of the entire roof system, and then compare the approximately 14,000 sq. ft. of replacement to that total area. If the sq. footage exceeds 1/3 of the total area, the client must make a judgement call based on their appetite for risk, but in no instance should they expense the replacements if they relate to 40% or more of the total surface area.**



e. 1.263(a)-3(l) - **Adaptations**

i. A taxpayer must capitalize as an improvement an amount paid to adapt a unit of property to a new or different use. In general, an amount is paid to adapt a unit of property to a new or different use if the adaptation is not consistent with the taxpayer's ordinary use of the unit of property at the time originally placed in service by the taxpayer.

ii. The replacement of the plaza deck system, even in the areas where the roofing/deck system was or will be switched to a ballast roof system, is not an adaptation of the unit of property (here, the building structure). The primary function of the decking is to function as a roof (after all, the deck system is being replaced not because it is unsafe to stand on, but because it no longer serves its primary function as a roof), and that will continue to be its primary function after the replacements. More importantly, the use of the building structure as a whole remains unchanged.

### About Scarpello Consulting

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