

Example 1. Replacement of loss component. A owns a manufacturing building containing various types of manufacturing equipment. A does a cost segregation study of the manufacturing building and properly determines that a walk-in freezer in the manufacturing building is section 1245 property as defined in section 1245(a)(3). The freezer is not part of the building structure or the HVAC system under paragraph (e)(2)(i) or (e)(2)(ii)(B)(1) of this section. Several components of the walk-in freezer cease to function, and A decides to replace them. A abandons the old freezer components and properly recognizes a loss from the abandonment of the components. A replaces the abandoned freezer components with new components and incurs costs to acquire and install the new components. Under paragraph (k)(1)(i) of this section, A must capitalize the amounts paid to acquire and install the new freezer components because A replaced components for which it had properly deducted a loss.

Example 2. Replacement of sold component. Assume the same facts as in Example 1, except that A did not abandon the components but instead sold them to another party and properly recognized a loss on the sale. Under paragraph (k)(1)(ii) of this section, A must capitalize the amounts paid to acquire and install the new freezer components because A replaced components for which it had properly taken into account the adjusted basis of the components in realizing a loss from the sale of the components.

Example 3. Restoration after casualty loss. B owns an office building that it uses in its trade or business. A storm damages the office building at a time when the building has an adjusted basis of \$500,000. B deducts under section 165 a casualty loss in the amount of \$50,000, and properly reduces its basis in the office building to \$450,000. B hires a contractor to repair the damage to the building, including the repair of the building roof and the removal of debris from the building premises. B pays the contractor \$50,000 for the work. Under paragraph (k)(1)(iii) of this section, B must treat the \$50,000 amount paid to the contractor as a restoration of the building structure because B properly adjusted its basis in that amount as a result of a casualty loss under section 165, and the amount does not exceed the limit in paragraph (k)(4) of this section. Therefore, B must treat the amount paid as an improvement to the building unit of property and, under paragraph (d)(2) of this section, must capitalize the amount paid.

Example 4. Restoration after casualty event. Assume the same facts as in Example 3, except that B receives insurance proceeds of \$50,000 after the casualty to compensate for its loss. B cannot deduct a casualty loss under section 165 because its loss was compensated by insurance. However, B properly reduces its basis in the property by the amount of the insurance proceeds. Under paragraph (k)(1)(iii) of this section, B must treat the \$50,000 amount paid to the contractor as a restoration of the building structure because B has properly taken a basis adjustment relating to a casualty event described in section 165, and the amount does not exceed the limit in paragraph (k)(4) of this section. Therefore, B must treat the amount paid as an improvement to the building unit of property and, under paragraph (d)(2) of this section, must capitalize the amount paid.

Example 5. Restoration after casualty loss; limitation. (i) C owns a building that it uses in its trade or business. A storm damages the building at a time when the building has an adjusted basis of \$500,000. C determines that the cost of restoring its property is \$750,000, deducts a casualty loss under section 165 in the amount of \$500,000, and properly reduces its basis in the building to \$0. C hires a contractor to repair the damage to the building and pays the contractor \$750,000 for the work. The work involves replacing the entire roof structure of the building at a cost of \$350,000 and pumping water from the building, cleaning debris from the interior and exterior, and replacing areas of damaged dry wall and flooring at a cost of \$400,000. Although resulting from the casualty event, the pumping, cleaning, and replacing damaged drywall and flooring, does not directly benefit and is not incurred by reason of the roof replacement.

(ii) Under paragraph (k)(1)(vi) of this section, C must capitalize as an improvement the \$350,000 amount paid to the contractor to replace the roof structure because the roof structure constitutes a major component and a substantial structural part of the building unit of property. In addition, under paragraphs (k)(1)(iii) and (k)(4)(i), C must treat as a restoration the remaining costs, limited to the excess of the adjusted basis of the building over the amounts paid for the improvement under paragraph (k)(1)(vi). Accordingly, C must treat as a restoration \$150,000 (\$500,000 - \$350,000) of the \$400,000 paid for the portion of the costs related to repairing and cleaning the building structure under paragraph (k)(1)(iii) of this section. Thus, in addition to the \$350,000 to replace the roof structure, C must also capitalize the \$150,000 as an improvement to the building unit of property under paragraph (d)(2) of this section. C is not required to capitalize the remaining \$250,000 repair and cleaning costs under paragraph (k)(1)(iii) of this section.

Example 6. Restoration of property in a state of disrepair. D owns and operates a farm with several barns and outbuildings. D did not use or maintain one of the outbuildings on a regular basis, and the outbuilding fell into a state of disrepair. The outbuilding previously was used for storage but can no longer be used for that purpose because the building is not structurally sound. D decides to restore the outbuilding and pays an amount to shore up the walls and replace the siding. Under paragraphs (e)(2)(ii) and (k)(2) of this section, an amount is paid to improve a building if the amount is paid to restore the building structure or any building system. The walls and siding are part of the building structure under paragraph (e)(2)(ii)(A) of this section. Under paragraph (k)(1)(iv) of this section, D must treat the amount paid to shore up the walls and replace the siding as a restoration of the building structure because the amounts return the building structure to its ordinarily efficient operating condition after it had deteriorated to a state of disrepair and was no longer functional for its intended use. Therefore, D must treat the amount paid to shore up the walls and replace the siding as an improvement to the building unit of property and, under paragraph (d)(2) of this section, must capitalize the amount paid.

Example 7. Rebuild of property to like-new condition before end of class life. E is a Class I railroad that owns a fleet of freight cars. Assume the freight cars have a recovery period of 7 years under section 168(c) and a class life of 14 years. Every 8 to 10 years, E rebuilds its freight cars. Ten years after E places the freight car in service, E performs a rebuild to the manufacturer's original specification, which includes a complete disassembly, inspection, and reconditioning or replacement of components of the suspension and draft systems, trailer hitches, and other special equipment. E also modifies the car to upgrade various components to the latest engineering standards. The freight car is stripped to the frame, with all of its substantial components either reconditioned or replaced. The frame itself is the longest-lasting part of the car and is reconditioned. The walls of the freight car are replaced or are sandblasted and repainted. New wheels are installed on the car. All the remaining components of the car are restored before they are reassembled. At the end of the rebuild, the freight car has been restored to like-new condition under the manufacturer's specifications.

Assume the freight car is the unit of property. E is not required to treat as an improvement and capitalize the amounts paid to rebuild the freight car under paragraph (k)(1)(v) of this section because, although the amounts paid restore the freight car to like-new condition, the amounts were not paid after the end of the class life of the freight car. However, see paragraphs (k)(1)(vi) and (k)(6) of this section to determine whether any amounts must be capitalized because they are paid for the replacement of a major component or a substantial structural part of the unit of property.

Example 8. Rebuild of property to like-new condition after end of class life.

Assume the same facts as in Example 7, except that E rebuilds the freight car 15 years after E places it in service. Under paragraph (k)(1)(v) of this section, E must treat as an improvement and capitalize the amounts paid to rebuild the freight car because the amounts paid restore the freight car to like-new condition after the end of the class life of the freight car.

Example 9. Not a rebuild to a like-new condition. F is a commercial airline engaged in the business of transporting freight and passengers. To conduct its business, F owns several aircraft. As a condition of maintaining its airworthiness certificates, F is required by the FAA to establish and adhere to a continuous maintenance program for each aircraft in its fleet. F performs heavy maintenance on its airframes every 8 to 10 years. In Year 1, F purchased an aircraft for \$15 million. In Year 16, F paid \$2 million for the labor and materials necessary to perform the second heavy maintenance visit on the airframe of an aircraft. To perform the heavy maintenance visit, F extensively disassembles the airframe, removing items such as engines, landing gear, cabin and passenger compartment seats, side and ceiling panels, baggage stowage bins, galleys, lavatories, floor boards, cargo loading systems, and flight control surfaces. As specified by F's maintenance manual for the aircraft, F then performs certain tasks on the disassembled airframe for the purpose of preventing deterioration of the inherent safety and reliability levels of the airframe. These tasks include lubrication and service, operational and visual checks, inspection and functional checks, reconditioning of minor parts and components, and removal, discard, and replacement of certain life-limited single cell parts, such as cartridges, canisters, cylinders, and disks. Reconditioning of parts includes burnishing corrosion, repairing cracks, dents, gouges, punctures, tightening or replacing loose or missing fasteners, replacing damaged seals, gaskets, or valves, and similar activities. In addition to the tasks described above, to comply with certain FAA airworthiness directives, F inspects specific skin locations, applies doublers over small areas where cracks were found, adds structural reinforcements, and replaces skin panels on a small section of the fuselage. However, the heavy maintenance does not include the replacement of any major components or substantial structural parts of the aircraft with new components. In addition, the heavy maintenance visit does not bring the aircraft to the status of new, rebuilt, remanufactured, or a similar status under FAA guidelines or the manufacturer's original specifications. After the heavy maintenance, the aircraft was reassembled. Assume the aircraft, including the engines, is a unit of property and has a class life of 12 years under section 168(c). Although the heavy maintenance is performed after the end of the class life of the aircraft, F is not required to treat the heavy maintenance as a

restoration and improvement of the unit of property under paragraph (k)(1)(v) of this section because, although extensive, the amounts paid do not restore the aircraft to like-new condition. See also paragraph (i)(1)(iii) of this section for the application of the safe harbor for routine maintenance.

Example 10. Replacement of major component or substantial structural part; personal property. G is a common carrier that owns a fleet of petroleum hauling trucks. G pays amounts to replace the existing engine, cab, and petroleum tank with a new engine, cab, and tank. Assume the tractor of the truck (which includes the cab and the engine) is a single unit of property and that the trailer (which contains the petroleum tank) is a separate unit of property. The new engine and the cab each constitute a part or combination of parts that comprise a major component of G's tractor, because they perform a discrete and critical function in the operation of the tractor. In addition, the cab constitutes a part or combination of parts that comprise a substantial structural part of G's tractor. Therefore, the amounts paid for the replacement of the engine and the cab must be capitalized under paragraph (k)(1)(vi) of this section. Moreover, the new petroleum tank constitutes a part or combination of parts that comprise a major component and a substantial structural part of the trailer. Accordingly, the amounts paid for the replacement of the tank also must be capitalized under paragraph (k)(1)(vi) of this section.

Example 11. Repair performed during restoration. Assume the same facts as in Example 10, except that, at the same time the engine and cab of the tractor are replaced, G pays amounts to paint the cab of the tractor with its company logo and to fix a broken taillight on the tractor. The repair of the broken taillight and the painting of the cab generally are deductible expenses under §1.162-4. However, under paragraph (g)(1)(i) of this section, a taxpayer must capitalize all the direct costs of an improvement and all the indirect costs that directly benefit or are incurred by reason of an improvement. Repairs and maintenance that do not directly benefit or are not incurred by reason of an improvement are not required to be capitalized under section 263(a), regardless of whether they are made at the same time as an improvement. For the amounts paid to paint the logo on the cab, G's need to paint the logo arose from the replacement of the cab with a new cab. Therefore, under paragraph (g)(1)(i) of this section, G must capitalize the amounts paid to paint the cab as part of the improvement to the tractor because these amounts directly benefit and are incurred by reason of the restoration of the tractor. The amounts paid to repair the broken taillight are not for the replacement of a major component, do not directly benefit, and are not incurred by reason of the replacement of the cab or the engine under paragraph (g)(1)(i) of this section, even though the repair was performed at the same time as these replacements. Thus, G is not required to capitalize the amounts paid to repair the broken taillight.

Example 12. Related amounts to replace major component or substantial structural part; personal property. (i) H owns a retail gasoline station, consisting of a paved area used for automobile access to the pumps and parking areas, a building used to market gasoline, and a canopy covering the gasoline pumps. The premises also consist of underground storage tanks (USTs) that are connected by piping to the

pumps and are part of the gasoline pumping system used in the immediate retail sale of gas. The USTs are components of the gasoline pumping system. To comply with regulations issued by the Environmental Protection Agency, H is required to remove and replace leaking USTs. In Year 1, H hires a contractor to perform the removal and replacement, which consists of removing the old tanks and installing new tanks with leak detection systems. The removal of the old tanks includes removing the paving material covering the tanks, excavating a hole large enough to gain access to the old tanks, disconnecting any strapping and pipe connections to the old tanks, and lifting the old tanks out of the hole. Installation of the new tanks includes placement of a liner in the excavated hole, placement of the new tanks, installation of a leak detection system, installation of an overfill system, connection of the tanks to the pipes leading to the pumps, backfilling of the hole, and replacement of the paving. H also is required to pay a permit fee to the county to undertake the installation of the new tanks.

(ii) H pays the permit fee to the county on October 15, Year 1. On December 15, Year 1, the contractor completes the removal of the old USTs and bills H for the costs of removal. On January 15, Year 2, the contractor completes the installation of the new USTs and bills H for the remainder of the work. Assume that H computes its taxes on a calendar year basis and H's gasoline pumping system is the unit of property. Under paragraph (k)(1)(vi) of this section, H must capitalize the amounts paid to replace the USTs as a restoration to the gasoline pumping system because the USTs are parts or combinations of parts that comprise a major component and substantial structural part of the gasoline pumping system. Moreover, under paragraph (g)(2) of this section, H must capitalize the costs of removing the old USTs because H has not taken a loss on the disposition of the USTs, and the amounts to remove the USTs directly benefit and are incurred by reason of the restoration of, and improvement to, the gasoline pumping system. In addition, under paragraph (g)(1) of this section, H must capitalize the permit fees because they directly benefit and are incurred by reason of the improvement to the gasoline pumping system. Finally, under paragraph (g)(3) of this section, H must capitalize the related amounts paid to improve the gasoline pumping system, including the permit fees, the amount paid to remove the old USTs, and the amount paid to install the new USTs, even though the amounts were separately invoiced, paid to different parties, and incurred in different tax years.

Example 13. Not replacement of major component; incidental. J owns a machine shop in which it makes dies used by manufacturers. In Year 1, J purchased a drill press for use in its production process. In Year 3, J discovers that the power switch assembly, which controls the supply of electric power to the drill press, has become damaged and cannot operate. To correct this problem, J pays amounts to replace the power switch assembly with comparable and commercially available replacement parts. Assume that the drill press is a unit of property under paragraph (e) of this section and the power switch assembly is a small component of the drill press that may be removed and installed with relative ease. The power switch assembly is not a major component of the unit of property under paragraph (k)(6)(i)(A) of this section because, although the power assembly may affect the function of J's drill press by controlling the supply of electric power, the power assembly is an incidental component of the drill press. In

addition, the power assembly is not a substantial structural part of J's drill press under paragraph (k)(6)(i)(B) of this section. Therefore, J is not required to capitalize the costs to replace the power switch assembly under paragraph (k)(1)(vi) of this section.

Example 14. Replacement of major component or substantial structural part; roof. K owns a manufacturing building. K discovers several leaks in the roof of the building and hires a contractor to inspect and fix the roof. The contractor discovers that a major portion of the decking has rotted and recommends the replacement of the entire roof. K pays the contractor to replace the entire roof, including the decking, insulation, asphalt, and various coatings. Under paragraphs (e)(2)(ii) and (k)(2) of this section, an amount is paid to improve a building if the amount is paid to restore the building structure or any building system. The roof is part of the building structure as defined under paragraph (e)(2)(ii)(A) of this section. 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) of this section. 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) of this section. Therefore, under either analysis, K must treat the amount paid to replace the roof as a restoration of the building under paragraphs (k)(1)(vi) and (k)(2) of this section and must capitalize the amount paid as an improvement under paragraph (d)(2) of this section.

Example 15. Not replacement of major component or substantial structural part; roof membrane. L owns a building in which it conducts its retail business. The roof decking over L's building is covered with a waterproof rubber membrane. Over time, the rubber membrane begins to wear, and L begins to experience leaks into its retail premises. However, the building is still functioning in L's business. To eliminate the problems, a contractor recommends that L replace the membrane on the roof with a new rubber membrane. Accordingly, L pays the contractor to strip the original membrane and replace it with a new rubber membrane. The new membrane is comparable to the original membrane but corrects the leakage problems. Under paragraphs (e)(2)(ii) and (k)(2) of this section, an amount is paid to improve a building if the amount is paid to restore the building structure or any building system. The roof, including the membrane, is part of the building structure as defined under paragraph (e)(2)(ii)(A) of this section. 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) of this section. Although the replacement membrane may aid in the function of the building structure, it does not, by itself, comprise a significant portion of the roof major component under paragraph (k)(6)(ii)(A) of this section. In addition, the replacement membrane does not comprise a substantial structural part of L's building structure under paragraph (k)(6)(ii)(B) of this section. Therefore, L is not required to capitalize the amount paid to replace the membrane as a restoration of the building under paragraph (k)(1)(vi) of this section.

Example 16. Not a replacement of major component or substantial structural part; HVAC system. M owns a building in which it operates an office that provides

medical services. The building contains one HVAC system, which is comprised of three furnaces, three air conditioning units, and duct work that runs throughout the building to distribute the hot or cold air throughout the building. One furnace in M's building breaks down, and M pays an amount to replace it with a new furnace. Under paragraphs (e)(2)(ii) and (k)(2) of this section, an amount is paid to improve a building if the amount is paid to restore the building structure or any building system. The HVAC system, including the furnaces, is a building system under paragraph (e)(2)(ii)(B)(1) of this section. As the parts that provide the heating function in the system, the three furnaces, together, perform a discrete and critical function in the operation of the HVAC system and are therefore a major component of the HVAC system under paragraph (k)(6)(i)(A) of this section. However, the single furnace is not a significant portion of this major component of the HVAC system under paragraph (k)(6)(ii)(A) of this section, or a substantial structural part of the HVAC system under paragraph (k)(6)(ii)(B) of this section. Therefore, M is not required to treat the amount paid to replace the furnace as a restoration of the building under paragraph (k)(1)(vi) of this section.

Example 17. Replacement of major component or substantial structural part; HVAC system. N owns a large office building in which it provides consulting services. The building contains one HVAC system, which is comprised of one chiller unit, one boiler, pumps, duct work, diffusers, air handlers, outside air intake, and a cooling tower. The chiller unit includes the compressor, evaporator, condenser, and expansion valve, and it functions to cool the water used to generate air conditioning throughout the building. N pays an amount to replace the chiller with a comparable unit. Under paragraphs (e)(2)(ii) and (k)(2) of this section, an amount is paid to improve a building if the amount is paid to restore the building structure or any building system. The HVAC system, including the chiller unit, is a building system under paragraph (e)(2)(ii)(B)(1) of this section. The chiller unit performs a discrete and critical function in the operation of the HVAC system because it provides the cooling mechanism for the entire system. Therefore, the chiller unit is a major component of the HVAC system under paragraph (k)(6)(ii)(A) of this section. Because the chiller unit comprises a major component of a building system, N must treat the amount paid to replace the chiller unit as a restoration to the building under paragraphs (k)(1)(vi) and (k)(2) of this section and must capitalize the amount paid as an improvement to the building under paragraph (d)(2) of this section.

Example 18. Not replacement of major component or substantial structural part; HVAC system. O owns an office building that it uses to provide services to customers. The building contains a HVAC system that incorporates ten roof-mounted units that provide heating and air conditioning for the building. The HVAC system also consists of controls for the entire system and duct work that distributes the heated or cooled air to the various spaces in the building's interior. O begins to experience climate control problems in various offices throughout the office building and consults with a contractor to determine the cause. The contractor recommends that O replace three of the roof-mounted heating and cooling units. O pays an amount to replace the three specified units. No work is performed on the other roof-mounted heating and cooling units, the duct work, or the controls. Under paragraphs (e)(2)(ii) and (k)(2) of this section, an

amount is paid to improve a building if the amount restores the building structure or any building system. The HVAC system, including the 10 roof-mounted heating and cooling units, is a building system under paragraph (e)(2)(ii)(B)(1) of this section. As the components that generate the heat and the air conditioning in the HVAC system, the 10 roof-mounted units, together, perform a discrete and critical function in the operation of the HVAC system and, therefore, are a major component of the HVAC system under paragraph (k)(6)(ii)(A) of this section. The three roof-mounted heating and cooling units are not a significant portion of a major component of the HVAC system under (k)(6)(ii)(A) of this section, or a substantial structural part of the HVAC system, under paragraph (k)(6)(ii)(B) of this section. Accordingly, O is not required to treat the amount paid to replace the three roof-mounted heating and cooling units as a restoration of the building under paragraph (k)(1)(iv) of this section.

Example 19. Replacement of major component or substantial structural part; fire protection system. P owns a building that it uses to operate its business. P pays an amount to replace the sprinkler system in the building with a new sprinkler system. Under paragraphs (e)(2)(ii) and (k)(2) of this section, an amount is paid to improve a building if the amount restores the building structure or any building system. The fire protection and alarm system, including the sprinkler system, is a building system under paragraph (e)(2)(ii)(B)(6) of this section. As the component that provides the fire suppression mechanism in the system, the sprinkler system performs a discrete and critical function in the operation of the fire protection and alarm system and is therefore a major component of the system under paragraph (k)(6)(ii)(A) of this section. Because the sprinkler system comprises a major component of a building system, P must treat the amount paid to replace the sprinkler system as restoration to the building unit of property under paragraphs (k)(1)(vi) and (k)(2) of this section and must capitalize the amount paid as an improvement to the building under paragraph (d)(2) of this section.

Example 20. Replacement of major component or substantial structural part; electrical system. Q owns a building that it uses to operate its business. Q pays an amount to replace the wiring throughout the building with new wiring that meets building code requirements. Under paragraphs (e)(2)(ii) and (k)(2) of this section, an amount is paid to improve a building if the amount restores the building structure or any building system. The electrical system, including the wiring, is a building system under paragraph (e)(2)(ii)(B)(3) of this section. As the component that distributes the electricity throughout the system, the wiring performs a discrete and critical function in the operation of the electrical system under paragraph (k)(6)(ii)(A) of this section. The wiring also comprises a large portion of the physical structure of the electrical system under paragraph (k)(6)(ii)(B) of this section. Because the wiring comprises a major component and a substantial structural part of a building system, Q must treat the amount paid to replace the wiring as a restoration to the building under paragraphs (k)(1)(vi) and (k)(2) of this section and must capitalize the amount paid as an improvement to the building under paragraph (d)(2) of this section.

Example 21. Not a replacement of major component or substantial structural part; electrical system. R owns a building that it uses to operate its business. R pays

an amount to replace 30 percent of the wiring throughout the building with new wiring that meets building code requirements. Under paragraphs (e)(2)(ii) and (k)(2) of this section, an amount is paid to improve a building if the amount restores the building structure or any building system. The electrical system, including the wiring, is a building system under paragraph (e)(2)(ii)(B)(3) of this section. All the wiring in the building comprises a major component because it performs a discrete and critical function in the operation of the electrical system. However, the portion of the wiring that was replaced is not a significant portion of the wiring major component under paragraph (k)(6)(ii)(A) of this section, nor does it comprise a substantial structural part of the electrical system under paragraph (k)(6)(ii)(B) of this section. Therefore, under paragraph (k)(6) of this section, the replacement of 30 percent of the wiring is not the replacement of a major component or substantial structural part of the building, and R is not required to treat the amount paid to replace 30 percent of the wiring as a restoration to the building under paragraph (k)(1)(iv) of this section.

Example 22. Replacement of major component or substantial structural part; plumbing system. S owns a building in which it conducts a retail business. The retail building has three floors. The retail building has men's and women's restrooms on two of the three floors. S decides to update the restrooms by paying an amount to replace the plumbing fixtures in all of the restrooms, including all the toilets and sinks, with modern style plumbing fixtures of similar quality and function. S does not replace the pipes connecting the fixtures to the building's plumbing system. Under paragraphs (e)(2)(ii) and (k)(2) of this section, an amount is paid to improve a building if the amount restores the building structure or any building system. The plumbing system, including the plumbing fixtures, is a building system under paragraph (e)(2)(ii)(B)(2) of this section. All the toilets together perform a discrete and critical function in the operation of the plumbing system, and all the sinks, together, also perform a discrete and critical function in the operation of the plumbing system. Therefore, under paragraph (k)(6)(ii)(A) of this section, all the toilets comprise a major component of the plumbing system, and all the sinks comprise a major component of the plumbing system. Accordingly, S must treat the amount paid to replace all of the toilets and all of the sinks as a restoration of the building under paragraphs (k)(1)(vi) and (k)(2) of this section and must capitalize the amount paid as an improvement to the building under paragraph (d)(2) of this section.

Example 23. Not replacement of major component or substantial structural part; plumbing system. Assume the same facts as Example 22 except that S does not update all the bathroom fixtures. Instead, S only pays an amount to replace 8 of the total of 20 sinks located in the various restrooms. The 8 replaced sinks, by themselves, do not comprise a significant portion of a major component (the 20 sinks) of the plumbing system under paragraph (k)(6)(ii)(A) of this section nor do they comprise a large portion of the physical structure of the plumbing system under paragraph (k)(6)(ii)(B) of this section. Therefore, under paragraph (k)(6) of this section, the replacement of the eight sinks does not constitute the replacement of a major component or substantial structural part of the building, and S is not required to treat the

amount paid to replace the eight sinks as a restoration of a building under paragraph (k)(1)(iv) of this section.

Example 24. Replacement of major component or substantial structural part; plumbing system. (i) T owns and operates a hotel building. T decides that, to attract customers and to remain competitive, it needs to update the guest rooms in its facility. Accordingly, T pays amounts to replace the bathtubs, toilets, and sinks, and to repair, repaint, and retile the bathroom walls and floors, which is necessitated by the installation of the new plumbing components. The replacement bathtubs, toilets, sinks, and tile are new and in a different style, but are similar in function and quality to the replaced items. T also pays amounts to replace certain section 1245 property, such as the guest room furniture, carpeting, drapes, table lamps, and partition walls separating the bathroom area. T completes this work on two floors at a time, closing those floors and leaving the rest of the hotel open for business. In Year 1, T pays amounts to perform the updates for 4 of the 20 hotel room floors and expects to complete the renovation of the remaining rooms over the next two years.

(ii) Under paragraphs (e)(2)(ii) and (k)(2) of this section, an amount is paid to improve a building if the amount restores the building structure or any building system. The plumbing system, including the bathtubs, toilets, and sinks, is a building system under paragraph (e)(2)(ii)(B)(2) of this section. All the bathtubs, together, all the toilets, together, and all the sinks together in the hotel building perform discrete and critical functions in the operation of the plumbing system under paragraph (k)(6)(ii)(A) of this section and comprise a large portion of the physical structure of the plumbing system under paragraph (k)(6)(ii)(B) of this section. Therefore, under paragraph (k)(6)(ii) of this section, these plumbing components comprise major components and substantial structural parts of the plumbing system, and T must treat the amount paid to replace these plumbing components as a restoration of, and improvement to, the building under paragraphs (k)(1)(vi) and (k)(2) of this section. In addition, under paragraph (g)(1)(i) of this section, T must treat the costs of repairing, repainting, and retiling the bathroom walls and floors as improvement costs because these costs directly benefit and are incurred by reason of the improvement to the building. Further, under paragraph (g)(3) of this section, T must treat the costs incurred in Years 1, 2, and 3 for the bathroom remodeling as improvement costs, even though they are incurred over a period of several taxable years, because they are related amounts paid to improve the building unit of property. Accordingly, under paragraph (d)(2) of this section, T must treat all the amounts it incurs to update its hotel restrooms as an improvement to the hotel building and capitalize these amounts. In addition, under §1.263(a)-2 of the regulations, T must capitalize the amounts paid to acquire and install each section 1245 property.

Example 25. Not replacement of major component or substantial structural part; windows. U owns a large office building that it uses to provide office space for employees that manage U's operations. The building has 300 exterior windows that represent 25 percent of the total surface area of the building. In Year 1, U pays an amount to replace 100 of the exterior windows that had become damaged. At the time of these replacements, U has no plans to replace any other windows in the near future.

Under paragraphs (e)(2)(ii) and (k)(2) of this section, an amount is paid to improve a building if the amount restores the building structure or any building system. The exterior windows are part of the building structure as defined under paragraph (e)(2)(ii)(A) of this section. The 300 exterior windows perform a discrete and critical function in the operation of the building structure and are, therefore, a major component of the building structure under paragraph (k)(6)(i)(A) of this section. However, the 100 windows do not comprise a significant portion of this major component of the building structure under paragraph (k)(6)(ii)(A) of this section or a substantial structural part of the building structure under paragraph (k)(6)(ii)(B) of this section. Therefore, under paragraph (k)(6) of this section, the replacement of the 100 windows does not constitute the replacement of a major component or substantial structural part of the building, and U is not required to treat the amount paid to replace the 100 windows as restoration of the building under paragraph (k)(1)(iv) of this section.

Example 26. Replacement of major component; windows. Assume the same facts as Example 25, except that that U replaces 200 of the 300 windows on the building. The 300 exterior windows perform a discrete and critical function in the operation of the building structure and are, therefore, a major component of the building structure under paragraph (k)(6)(i)(A) of this section. The 200 windows comprise a significant portion of this major component of the building structure under paragraph (k)(6)(ii)(A) of this section. Therefore, under paragraph (k)(6) of this section, the replacement of the 200 windows comprise the replacement of a major component of the building structure. Accordingly, U must treat the amount paid to replace the 200 windows as a restoration of the building under paragraphs (k)(1)(vi) and (k)(2) of this section and must capitalize the amount paid as an improvement to the building under paragraph (d)(2) of this section.

Example 27. Replacement of substantial structural part; windows. Assume the same facts as Example 25, except that the building is a modern design and the 300 windows represent 90 percent of the total surface area of the building. U replaces 100 of the 300 windows on the building. The 300 exterior windows perform a discrete and critical function in the operation of the building structure and are, therefore, a major component of the building structure under paragraph (k)(6)(i)(A) of this section. The 100 windows do not comprise a significant portion of this major component of the building structure under paragraph (k)(6)(ii)(A) of this section, however, they do comprise a substantial structural part of the building structure under paragraph (k)(6)(ii)(B) of this section. Therefore, under paragraph (k)(6) of this section, the replacement of the 100 windows comprise the replacement of a substantial structural part of the building structure. Accordingly, U must treat the amount paid to replace the 100 windows as a restoration of the building unit of property under paragraphs (k)(1)(vi) and (k)(2) of this section and must capitalize the amount paid as an improvement to the building under paragraph (d)(2) of this section.

Example 28. Not replacement of major component or substantial structural part; floors. V owns and operates a hotel building. V decides to refresh the appearance of the hotel lobby by replacing the floors in the lobby. The hotel lobby comprises less than

10 percent of the square footage of the entire hotel building. V pays an amount to replace the wood flooring in the lobby with new wood flooring of a similar quality. V did not replace any other flooring in the building. Assume that the wood flooring constitutes section 1250 property. Under paragraphs (e)(2)(ii) and (k)(2) of this section, an amount is paid to improve a building if the amount restores the building structure or any building system. The wood flooring is part of the building structure under paragraph (e)(2)(ii)(A) of this section. All the floors in the hotel building comprise a major component of the building structure because they perform a discrete and critical function in the operation of the building structure. However, the lobby floors are not a significant portion of a major component (that is, all the floors) under paragraph (k)(6)(ii)(A) of this section, nor do the lobby floors comprise a substantial structural part of the building structure under paragraph (k)(6)(ii)(B) of this section. Therefore, under paragraph (k)(6) of this section, the replacement of the lobby floors is not the replacement of a major component or substantial structural part of the building unit of property, and V is not required to treat the amount paid for the replacement of the lobby floors as a restoration to the building under paragraph (k)(1)(iv) of this section.

Example 29. Replacement of major component or substantial structural part; floors. Assume the same facts as Example 28, except that V decides to refresh the appearance of all the public areas of the hotel building by replacing all the floors in the public areas. To that end, V pays an amount to replace all the wood floors in all the public areas of the hotel building with new wood floors. The public areas include the lobby, the hallways, the meeting rooms, the ballrooms, and other public rooms throughout the hotel interiors. The public areas comprise approximately 40 percent of the square footage of the entire hotel building. All the floors in the hotel building comprise a major component of the building structure because they perform a discrete and critical function in the operation of the building structure. The floors in all the public areas of the hotel comprise a significant portion of a major component (that is, all the building floors) of the building structure. Therefore, under paragraph (k)(6)(ii)(A) of this section, the replacement of all the public area floors constitutes the replacement of a major component of the building structure. Accordingly, V must treat the amount paid to replace the public area floors as a restoration of the building unit of property under paragraphs (k)(1)(vi) and (k)(2) of this section and must capitalize the amounts as an improvement to the building under paragraph (d)(2) of this section.

Example 30. Replacement with no disposition. (i) X owns an office building with four elevators serving all floors in the building. X replaces one of the elevators. The elevator is a structural component of the office building. X chooses to apply Prop. Reg. §1.168(i)-8 to taxable years beginning on or after January 1, 2012, and before the applicability date of the final regulations. In accordance with Prop. Reg. §1.168(i)-8(c)(4)(ii)(A) (**[INSERT DATE OF PUBLICATION OF THIS DOCUMENT IN THE FEDERAL REGISTER]**), the office building (including its structural components) is the asset for tax disposition purposes. X does not treat the structural components of the office building as assets under Prop. Reg. §1.168(i)-8(c)(4)(iii) (**[INSERT DATE OF PUBLICATION OF THIS DOCUMENT IN THE FEDERAL REGISTER]**). X also does not make the partial disposition election provided under Prop. Reg. §1.168(i)-8(d)(2)

([INSERT DATE OF PUBLICATION OF THIS DOCUMENT IN THE FEDERAL REGISTER]), for the elevator. Thus, the retirement of the replaced elevator is not a disposition under section 168, and no loss is taken into account for purposes of paragraph (k)(1)(i) of this section.

(ii) Under paragraphs (e)(2)(ii) and (k)(2) of this section, an amount is paid to improve a building if the amount restores the building structure or any building system. The elevator system, including all four elevators, is a building system under paragraph (e)(2)(ii)(B)(5) of this section. The replacement elevator does not perform a discrete and critical function in the operation of elevator system under paragraph (k)(6)(ii)(A) of this section nor does it comprise a large portion of the physical structure of the elevator system under paragraph (k)(6)(ii)(B) of this section. Therefore, under paragraph (k)(6) of this section, the replacement elevator does not constitute the replacement of a major component or substantial structural part of the elevator system. Accordingly, X is not required to treat the amount paid to replace the elevator as a restoration to the building under either paragraph (k)(1)(i) or paragraph (k)(1)(vi) of this section.

Example 31. Replacement with disposition. The facts are the same as in **Example 30**, except X makes the partial disposition election provided under paragraph Prop. Reg. §1.168(i)-8(d)(2) (**([INSERT DATE OF PUBLICATION OF THIS DOCUMENT IN THE FEDERAL REGISTER])**), for the elevator. Although the office building (including its structural components) is the asset for disposition purposes, the result of X making the partial disposition election for the elevator is that the retirement of the replaced elevator is a disposition. Thus, depreciation for the retired elevator ceases at the time of its retirement (taking into account the applicable convention), and X recognizes a loss upon this retirement. Accordingly, X must treat the amount paid to replace the elevator as a restoration of the building under paragraphs (k)(1)(i) and (k)(2) of this section and must capitalize the amount paid as an improvement to the building under paragraph (d)(2) of this section. In addition, the replacement elevator is treated as a separate asset for tax disposition purposes pursuant to Prop. Reg. §1.168(i)-8(c)(4)(ii)(D) (**([INSERT DATE OF PUBLICATION OF THIS DOCUMENT IN THE FEDERAL REGISTER])**), and for depreciation purposes pursuant to section 168(i)(6).