

**SECTION 01 72 29
CUTTING AND PATCHING**

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. The requirements and limitations for the cutting and patching of work

1.2 SUBMITTALS

- A. Submit written request in advance of cutting or alteration, which affects:
 - 1. The structural integrity of any element of project
 - 2. The integrity of weather exposed or moisture resistant element
 - 3. The efficiency, maintenance, or safety of any operational element
 - 4. Visual qualities of sight exposed elements
 - 5. Work of Owner or separate contractor
- B. Include in request:
 - 1. The identification of project
 - 2. The location and description of affected work
 - 3. The necessity for cutting or alteration
 - 4. A description of proposed work, and products
 - 5. Any possible alternatives to cutting and patching
 - 6. Any effect on work of Owner or separate contractor
 - 7. Written permission from affected separate contractor(s)
 - 8. Proposed date and time the work starts

PART 2 PRODUCTS

2.1 MATERIALS

- A. Primary Products: Those required for original installation.
- B. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 01 60 00.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching.
- C. After uncovering existing work, assess conditions affecting performance of work.
- D. The contractor beginning of cutting or patching means acceptance of existing conditions.

3.2 PREPARATION

- A. Provide engineered drawings and/or calculations for temporary supports to ensure structural integrity of the work.
 - 1. Provide devices and methods to protect other portions of project from damage.
- B. Provide protection from elements for areas, which may be exposed by uncovering work.
- C. Maintain excavations free of water.

3.3 CUTTING

- A. Execute cutting and fitting including excavation and fill to complete work.
- B. Uncover work to install improperly sequenced work.
- C. Remove and replace defective or nonconforming work.
- D. Remove samples of installed work for testing when requested.
- E. Provide openings in the work for penetration of mechanical and electrical work.

- F. Employ skilled and experienced installer to perform cutting for weather exposed and moisture resistant elements, and sight-exposed surfaces.

3.4 PATCHING

- A. Execute patching to complement adjacent work.
- B. When patching holes or trench lines cut into existing concrete floors:
 - 1. Dowel rebars into existing concrete on all sides of the trench or hole.
 - a. Rebar dowels shall extend at least six inches into the existing concrete and be secured with construction epoxy.
 - b. Rebar dowels shall be placed at 12" interval along the entire repair perimeter.
 - c. Epoxy shall fully cure before placing concrete used to fill the hole or trench.
 - d. Bridging rebar may be required based upon the size of the trench or hole.
 - 2. All earth placed in the hole or trench shall be fully compacted per earthwork specifications prior to placing concrete.
 - 3. At the contractor's discretion, 200 psi flowable fill may be used in lieu of compacted earth.
- C. Properly fit products together to integrate with other work.
- D. Execute work by methods to avoid damage to other work and which, provide appropriate surfaces to receive patching and finishing.
- E. Employ original installer to perform cutting and patching for weather exposed and moisture resistant elements, and sight-exposed surfaces.
- F. Restore work with new products in accordance with requirements of Contract Documents.
- G. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- H. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material, to full thickness of the penetrated element.
- I. Refinish surfaces to match adjacent finish.
 - 1. For continuous surfaces, refinish to nearest intersection or natural break.
 - 2. For an assembly, refinish entire unit.

END OF SECTION