

SECTION 01 74 00
CLEANING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings, Agreement, Part 0, Special Conditions and Forms, and Division 01 Specifications Sections apply to this Section.

1.2 SUMMARY

- A. This Section describes the requirements for cleaning.
 - 1. The Contractor shall, at all times, exercise the greatest care to prevent damage to Owner's operations and building equipment, and refrain from using equipment or methodology which might endanger or interfere with Owner's operations, and refrain from using equipment or methodology which might endanger or interfere with the Owner's ability to provide service. Should the Contractor use any such equipment or methods, the Owner or Owner's Representative may, at its discretion, order all or any part of the Work stopped.
 - 2. Keep the Site and surrounding premises including public property free from accumulations of waste, debris, and rubbish caused by construction activities. On the interior of the building the Contractor is hereby prohibited from the storage of rubbish, debris, waste lumber, combustible or flammable materials, volatile substances, or other matter having a low flash point.
 - 3. If the Contractor fails to properly clean up, the company may do so and costs thereof shall be charged to the Contractor.
 - 4. At completion of Work, the Contractor shall remove waste materials, rubbish, tools, equipment, machinery, and surplus materials, and clean all exposed surfaces and shall leave the area clean and spotless unless more exact requirements are specified. This clean condition shall prevail in all areas that, in the opinion of the Architect / Engineer and/or Owner's Representative, is a result of the construction activities.
 - 5. At the completion of work the contractor shall provide technical cleaning to meet ISO 14644-1:2015 Class 8 requirements for the data hall space.

1.3 REFERENCES

- A. Comply with applicable requirements of the following standards and those others referenced in this Section, under the provisions of Section 01 42 00 - REFERENCES. Where these standards conflict with other specified requirements, the most restrictive requirements shall govern.
 - 1. ISO 14644-1:2015.

1.4 SAFETY REQUIREMENTS

- A. Standards: Maintain the Project in accordance with state and local safety and insurance standards.
- B. Hazards Control:
 - 1. Store volatile wastes in covered metal containers and remove from premises daily.
 - 2. Prevent accumulation of wastes that create hazardous conditions.
 - 3. Provide adequate ventilation during use of volatile or noxious substances.
- C. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws and Owner requirements stipulated elsewhere in these Contract Documents.

1. Do not burn or bury rubbish and waste materials on Project Site.
2. Do not dispose of volatile wastes such as mineral spirits, oils, or paint thinner in storm or sanitary drains.
3. Do not dispose of wastes into streams or waterways.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Use only cleaning materials recommended by manufacturer of surface to be cleaned.
- B. Use cleaning materials only on surfaces recommended by cleaning materials manufacturer.

PART 3 - EXECUTION

3.1 CLEANING DURING CONSTRUCTION – INTERIOR

- A. The Contractor shall provide and install a dust proof barrier separating the construction activities from the Owner's equipment. This is a requirement in all cases whether or not it is shown on the drawings. The dust proof barrier may be erected of a variety of materials from antistatic fire resistant Visqueen to steel studs and sheetrock so long as the barrier maintains the physical security, the environmental integrity, and the cleanliness necessary for the proper function of the Owner's equipment. The Architect / Engineer and Owner's Representative shall be the final authority on the viability of dust proof partitions. The primary dust proof barrier on this Project is, out of necessity, a quickly installed, easily removable system that must be pre-approved by the Owner and Architect / Engineer.
- B. The Contractor shall perform clean up daily and shall transport rubbish off Site. The Contractor shall remove the rubbish from the area daily or as often as required to keep a clean and safe work area for both the Contractor and the telephone company. Daily clean up will include sweeping, vacuuming, and wet mopping of all floors within the Contractor's work area to prevent the tracking of dust into the equipment areas and other interior areas of the building.
- C. Upon completion of Work in any given area, the Contractor shall remove all waste materials, rubbish and other debris from the area as well as all tools, scaffolding, construction equipment, machinery, and surplus material and shall leave the area clean and spotless unless otherwise specified. Such clean up shall include as applicable and without limitation of the following:
 1. Removal of all marks, stains, fingerprints, and other soil and dirt from any or all printed or decorated surfaces.
 2. Cleaning and waxing of all floors including removal of stains, paint, dirt, dust, etc.
 3. Cleaning and polishing of all hardware including removal of all stains, dust, dirt, paint, etc.
 4. Cleaning of and removing of stains, paint, dirt, and dust from all fixtures and equipment.
 5. Restoration to their original conditions, those portions of the Site that were not designated for construction by the Contract Documents, but which have been affected by the Contractor's operations.
 6. Removal of all temporary construction or protection devices and removal from the premises of all items of any nature which were installed or used for temporary purposes during the construction period.
- D. If a dispute arises between the separate Contractors as to their responsibility to clean up as herein otherwise provided for, the company may at its option, undertake the clean up and charge the costs thereof to the separate Contractors in an equitable manner determined by the Owner's Representative and/or Owner.

- E. The Contractor shall provide the means, procedures, and equipment in sufficient quantity and capacity to keep all areas free and clean at all times from moisture and water from any source whatsoever.

3.2 FINAL CLEANING

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ professional cleaners for final cleaning in cooperation with Owner's Representative recommendations. Clean each surface or unit to condition expected in the Owner's cleaning and maintenance program. Comply with manufacturer's written instructions.
 - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
 - a. Clean Project Site, yard, and grounds in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
 - c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
 - d. Remove tools, construction equipment, machinery, and surplus material from Project Site.
 - e. Remove snow and ice to provide safe access to building.
 - f. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - g. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
 - h. Sweep concrete floors broom clean in unoccupied spaces.
 - i. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain.
 - j. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
 - k. Remove labels that are not permanent.
 - l. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
 - 1) Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.
 - m. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
 - n. Replace parts subject to unusual operating conditions.
 - o. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
 - p. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
 - q. Clean ducts, on top of ducts, blowers, and coils if units were operated without filters during construction.
 - r. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective

- and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
 - s. Clean non-occupied spaces and limited-access spaces (such as plenums, shafts, equipment vaults, attics, and similar spaces) broom clean and free of surface dust.
 - t. Except as otherwise indicated or requested by Owner's Representative, remove temporary protection devices and facilities.
 - u. In preparation of substantial completion or occupancy, conduct final inspection of sight-exposed interior and exterior surfaces, and or concealed spaces.
 - v. Data Hall spaces will be cleaned to meet the requirements of ISO 14644-1:2015 Class 8 at the completion of work and prior to occupancy.
 - 1. Particle measured micron sizes: 5.0µ and 0.5µ.
 - w. Keep Project clean until it is occupied by Owner.
- C. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project Site and dispose of lawfully.
- D. Where extra materials of value remain, dispose of these to Owner's best advantage as directed.

END OF SECTION