

Operation and Maintenance Guide Data Center Rules & Regulations

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Revision History

Revision	Date	Page(s)	Description / Changes Made	Author
V6	7/20/09		Revised entire document	Digital Realty Trust TechOps
			Changed all instances of "DIGITAL REALTY TRUST" to Digital Realty Trust	Rebecca Brese
		8	Section III/A/1/c added "vacuuming, or any other dust producing activity"	Digital Realty Trust TechOps
		8	Section III/A/2/f changed "cause the staff to flee the building" to cause an inadvertent evacuation"	Digital Realty Trust TechOps
		8	Section IV/E added building or as defined by local jurisdiction	Digital Realty Trust TechOps
		9	Section V/B/1 added items (c) and (d)	Digital Realty Trust TechOps
		9	Section V/D/1 replaced "A copy of the Certificate of Insurance matrix will be kept with the Building Management" with "For a copy of the Building's insurance requirements, please contact Building Management"	Digital Realty Trust TechOps
		10	Section V/F/8 added "Only DIGITAL REALTY TRUST may install cameras on the building exterior perimeter.	Digital Realty Trust TechOps
		11	Section V/H/1 added "vacuuming"	Digital Realty Trust TechOps
		11	Section V/H/2 added "along with appropriate Change Management documentation	Digital Realty Trust TechOps
		12	Section V/J/4 changed "can be performed by Digital Realty Trust at an additional cost" to "may be requested through DIGITAL REALTY TRUSTDIGITAL REALTY TRUST by approved vendors. The customer will be responsible for all costs.	Digital Realty Trust TechOps
		12	Section V/J/5 added "surrounding exterior hallways, or any raised floor areas"	Digital Realty Trust TechOps



13	Section V/K/1 added "Any locations with Post-Tensioned slabs will require strict review and approval." Changed "work" to "plans"	Digital Realty Trust TechOps
13	Section V/K/2 replaced "portable" with "an inspected and approved HEPA filtered"	Digital Realty Trust TechOps
13	Section VI/B added Item 8	Digital Realty Trust TechOps
14	Section VI added Item C	Digital Realty Trust TechOps
14	Section VIII/A/1 changed "require the completion of Digital Realty Trust Electrical Switching Procedures" to "be required to adhere to the Change Management Process and will require a Method of Procedure (MOP)"	Digital Realty Trust TechOps
15	Section VIII/A/3 changed "Engineering" to "Operations Staff". Added " main distribution" before" electrical breaker positions"	Digital Realty Trust TechOps
15	Section IX/B changed "24 hours" to "five (5) business days". Added "and the customer will be responsible for any costs associated for the work to be performed after normal working hours.	Digital Realty Trust TechOps
15	Section IX/C replaced "Email replies received directly from the Building Manager are considered acceptable notice. Receipt confirmations will not be valid. All notices must be accompanied with a detailed description outlining the scope of work "with "All requests for fire suppression system work will be required to follow the DIGITAL REALTY TRUST Change Management process with any supporting documentation also submitted."	Digital Realty Trust TechOps
15	Section IX/D replaced "Building Management" with "DIGITAL REALTY TRUST or designated representatives"	Digital Realty Trust TechOps
17	Section XII/6 replaced "Any equipment with a "footprint" weight of 1250lbs or	Digital Realty Trust



	greater requires the review and placement approval of the building structural engineer prior to installation. All costs associated with the structural review are the responsibility of the Customer" with "Any equipment footprint must be reviewed and approved prior to installation and may require the review of a structural engineer. All surfaces (floors, walls, doors, etc.) must be adequately protected while the equipment is moved. These requirements will be at the customers sole cost.	TechOps
17	Section XII added Item 9	Digital Realty Trust TechOps
17	Section XIII/A/1 changed "All work must have a completed "Method of Operation" (MOP) that provides specific work plans before you begin work must be completed and approved before a "Change Management Work Request" number will be granted" with "All work (electrical, mechanical, telecommunication, etc.) must conform to the DIGITAL REALTY TRUST Change Management process which will require appropriate supporting documentation such as the "Method of Procedure" (MOP) that provides specific work plans. Before you begin work, all documentation must be completed and approved and you must have received final Change Management approval."	Digital Realty Trust TechOps
17	Section XIII/A deleted Items 2 and 3 and renumber remaining items	Digital Realty Trust TechOps
17	Section XIII/A/3 added "Notify Building Management prior to beginning any work for the day and upon completion of the work each day.	Digital Realty Trust TechOps
18	Section XIII/A/4 deleted "an authorized" before "Building Management"	Digital Realty Trust TechOps
18	Section XIII/A/13 added " Protective	Digital Realty



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		floor covering (such as Masonite) will	Trust
		be used to protect the path of travel as	TechOps
1		well as the raised floor tile against	
		damage due to equipment."	
	19	Section XV/B added "(reference	Digital Realty
		DIGITAL REALTY TRUST Signal	Trust
		Reference Grid standards)	TechOps
	19	Section XV/D replaced "raised floor"	Digital Realty
		with Turn-Key Datacenter™	Trust
			TechOps
	19	Section XV added Item E	Digital Realty
			Trust
			TechOps
	19	Section XVI/A/6 added "HEPA" before	Digital Realty
		"filter". Added "and must be inspected	Trust
		and approved by Building Operations	TechOps
		staff."	
	19	Section XVI/A/8 deleted "Please use	Digital Realty
		the break rooms"	Trust
			TechOps
	20	Section XVII/A deleted Item 4 and	Digital Realty
		renumbered remaining bullets	Trust
		_	TechOps
	20	Section XVIII added Item B	Digital Realty
			Trust
			TechOps



SECTION 11102: TURN-KEY DATACENTER™ RULES & REGULATIONS

I. THE PURPOSE OF THESE STANDARDS

This section applies to properties that are managed and operated by Digital Realty Trust(DIGITAL REALTY TRUST) along with their providers. These Rules and Regulations are highly recommended, for locations where customers manage the sites, but are not required.

- A. In order to achieve our goal of <u>NO UNPLANNED OUTAGES</u>, it is vital that everyone that enters the Turn-Key Datacenter[™] understand and follow the information provided in this document.
- B. This document will provide you with the following:
 - 1. An awareness of the critical nature of the Turn-Key Datacenter™ environment
 - An understanding of the need to follow the rules and regulations when working at these sites
 - The extra care you must take in performing all activities, even the most routine duties
 - 4. Who to call before you start and if you encounter a problem

II. DEFINITION OF MISSION CRITICAL AREAS

- AII DIGITAL REALTY TRUST Turn-Key Datacenter[™] are designated as Mission Critical Areas,
- B. A Mission Critical Area consists of all areas, rooms, systems and equipment associated with network and data processing operations including Meet-Me-Rooms, Point of Presence Rooms, and Turn-Key Datacenter spaces. These are typically always on raised floor with precision air conditioning and redundant electrical power. They also include the UPS modules, heat rejection systems, electrical distribution systems, and the computer equipment that depends on it.
- **C.** Mission Critical Areas need to maintain continuous up-time for all primary systems: 24 hours a day; 7 days a week, 365 days a year

III. UNPLANNED OUTAGES: INNOCENT ACTIVITIES/SERIOUS PROBLEMS

- A. An unplanned outage can be caused by well-meaning people doing innocent activities.
 - 1. An unplanned outage can cause:
 - a) Lost data
 - b) A decline in customer service
 - c) Lost revenue



- d) Financial liability
- e) Noncompliance with federal and state regulations
- f) ALL OF THE ABOVE

2. Examples of such emergencies are:

- a) Plugging into an electrical outlet and causing a short
- b) Replacing a fuse and bringing down a system load
- c) Spray painting, vacuuming, or any other dust producing activity in an area and setting off the fire alarm
- d) Pulling a loose cable and unplugging an equipment connection
- e) Opening or closing a power distribution panel and jarring a circuit breaker
- Using a toxic, odor-causing solvent without proper ventilation could cause an inadvertent evacuation.

IV. GENERAL RULES

- A. Depending on the risk assessment conducted by Building Management, the Vendors/Contractors may also be required to submit a Change Management Request and a detailed set of electrical switching procedures.
- B. Customer shall develop an access and authorization plan (the customer's "Access and Authorization Plan") before move-in that specifies process and permissions for granting access to the customer space. With proper staffing and processes, this plan can allow for immediate access to the customer space.
- C. If you observe any problems with doors not closing properly or you notice any other possible security concern, be sure to report the issue to Security promptly.
- D. Cameras, video equipment or visitors are not allowed in the Turn-Key Datacenter™ unless specifically authorized to do so. It is the customer's responsibility to inform Building Management and Security.
- E. All DIGITAL REALTY TRUST facilities are designated as 'no smoking facilities'. Smoking is allowed outside and not within 25 feet of the main entrance of the building or as defined by local jurisdiction.
- F. No food or drink is allowed in the Turn-Key Datacenter™ at any time.
- G. Tampering with the access control systems, camera equipment, fire alarm/smoke detectors, electrical or HVAC systems within the building is strictly prohibited and will result in immediate dismissal from the building.

V. ACCESS POLICY

A. Prior to providing access to the Turn-Key Datacenter™, it is required that everyone that will enter the space read, fully understand and sign the DIGITAL REALTY <u>- Pre-Work Information & Acknowledgement</u>. A copy of the signed form will be kept on file with the Building Management. For a copy of this document, please contact Building Management.



- B. Customer shall develop an <u>"Access and Authorization Plan"</u> before move-in that specifies process and permissions for granting access to the customer space. The plan should designate those that can grant access into the customer's space <u>"Customer Authorizers"</u>
 - 1. The plan must include the following:
 - The names of all employees of the customer that will require access into the Turn-Key Datacenter™ space.
 - Names of company(s) and employees of Vendors/Contractors and under what conditions they must meet in order to be allowed into the customer space unescorted.
 - c. It is the responsibility of the Customer to provide and update the access list. Customer should provide updates for, any changes in personnel that require removal from access to the Turn-Key Datacenter™.
 - d. As applicable per site, all personnel will be required to badge in and badge out for accountability especially in emergency situations. Tailgating is not allowed at any time.
 - Turn-Key Datacenter[™] access is restricted to personnel with an approved business need. Only designated <u>"Customer Authorizers"</u> may approve an individual's access into the Turn-Key Datacenter[™].
 - 3. Visitor(s) not on the approved access list will not be allowed to enter the customer space. Security will contact the <u>"Customer Authorizers"</u> and inform them that a visitor(s) has arrived and is in the waiting area. It will be the customer's responsibility whether to escort the visitor(s) or have Security issue a access badge.
 - 4. Access cards will expire upon 90 consecutive days of non-usage.

C. ACCESS FOR EMPLOYEES

- Security will issue access cards to each employee of the Customer that are on the <u>"Access and Authorization Plan".</u>
- The Customer should contact Building Management to schedule the issuing of employee access cards. Photo ID's will be required to be provided to Security prior in order to verify the person is on the approved customer access list.
- Many DIGITAL REALTY TRUSTfacilities utilize biometric readers, which will require programming prior to first-time entry.

D. VENDORS/CONTRACTORS ACCESS

Vendors/Contractors that require access to the Customer's Turn-Key Datacenter™
must meet the DIGITAL REALTY TRUST insurance requirements prior to
performing any work in the building. For a copy of the Building's insurance
requirements, please contact Building Management.



E. EMERGENCY ACCESS

- Emergency access of individuals not on the approved list can only be approved by the "Customer Authorizers".
- The "<u>Customer Authorizers</u>" should contact Security and provide a complete
 description of the scope of work and the nature of the emergency. Some work
 scope may require the approval of Building Management prior to granting access
 to the vendor.

F. SECURITY

- Card access doors control admittance to the Turn-Key Datacenter™. Never loan your badge or use another person's badge for any purpose. Failure to comply will cause your removal from the site.
- 2. Badges will be displayed above the waist at all times.
- If you should lose your ID badge, immediately report it to Security so it can be deactivated.
- 4. Do not allow others to tailgate into a controlled space behind you. Tailgating is a way for someone who lacks authorization to enter a restricted space. Each person must use the badge access system to facilitate their own access by use of their own badge. Conversely, you must not follow another person into any restricted space without having separately used your own badge to unlock the door into that space.
- 5. The badge access system may require that you pass your badge by a reader in order to exit the Turn-Key Datacenter™. This process will provide greater awareness of occupancy in the event of an emergency.
- 6. Do not attempt to enter areas to which you are not authorized.
- 7. If additional card readers are required, contact Building Management for pricing
- 8. The Turn-Key Datacenter™ is under 24-hour closed circuit TV cameras surveillance. They are deployed within the Turn-Key Datacenter™ and surrounding areas to monitor the security of exits and entrances. Activity viewed by these cameras is recorded and may be used for investigative purposes or when a security policy, such as tailgating, is violated. Only DIGITAL REALTY TRUSTmay install cameras on the building exterior perimeter.
- Tampering with the camera equipment is strictly prohibited and will result in immediate dismissal from the Building.
- 10. The Turn-Key Datacenter™ is secured with a "fail-safe" access control system utilizing either access card and/or biometric.



- 11. All doors into the Turn-Key Datacenter™ and other restricted space must not be propped open for any length of time. You should ensure that each controlled access door closes immediately after you enter.
- 12. All entrance into and out off the building exterior will be on the DIGITAL REALTY TRUST access control system. This also applies to all common area spaces, so as to not impede any other Customers or Building Management staff.
- 13. Customers may install their own access control systems only on the entrance into their space. The Customer must grant access to all DIGITAL REALTY TRUST, Building Management employees and third party provider's to perform work on systems and equipment that are within the Customers space. DIGITAL REALTY TRUST and/or Building Management will provide and maintain an updated access list.

G. SMOKE, ODOR, DUSTY WORK OR HEAT PRODUCING TOOLS/EQUIPMENT

- Any work that involves the use of tools that may produce smoke, dust or strong odors, (i.e. heat guns, hammer drills, grinders, vacuuming, etc) must be scheduled and approved by Building Management. Any such work shall require the disabling of the fire alarm enunciation, smoke detection and suppression systems.
- 2. An approved DIGITAL REALTY TRUST Fire Impairment Form must be submitted to Building Management for review and approval along with appropriate Change Management documentation.
- Any fines imposed by the local Fire Department resulting from any events or alarms created by such work will be the full financial responsibility of the Customer performing such work.
- Extensive dusty work may further require the replacement of HVAC unit filters and an associated charge for this material. The installation of pre-filter media over the HVAC unit intake may be required.
- Any vacuuming will require the use of a HEPA filtered vacuum. Onsite operations staff must approve the vacuum prior to use. This approval will consist of a thorough inspection of the equipment to ensure no hazards exist.
- Any accidental discharge of the fire suppression system caused by a Customer who violates these rules shall be the full financial responsibility of the Customer.

H. REMOVING RAISED FLOOR TILES

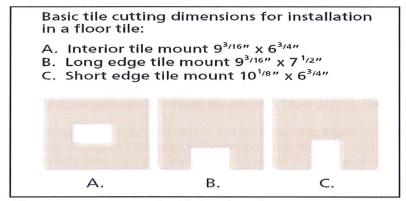
- In order to maintain static pressure for proper cooling of equipment, all installation or removal of raised floor <u>perforated</u> tiles, are to be performed by the Building Engineering Staff only.
- 2. Customers may remove and replace <u>solid</u> floor tiles within their space. To maintain structural integrity of the raised flooring, no more than 5 floor tiles or 3 floor stringers may be removed at any given period of time.



Customers are allowed to perform tile cuts for cable access. Prior approval from the Building Engineering Staff is required and the opening and grommet must be in compliance with Digital Realty Trust's standard listed below:

a. Koldlock Integral, Model # 1010.

Overall size: 11" x 8¹/₄" x 1⁵/₈" Grommet usable cable opening size: 8" x 4"* Grommet total cable opening size: 8" x 5"



*Ensures easy passage of cable heads and power connectors including a 100 amp Hubbell™ power plug (or equivalent 4.125" x 4.125" connector).

b. AirGuard Part # 116-800-001

- i. Overall Size 6.0" H x 12..0" W x 1.5"D inches
- ii. Hole open 5-3/8" H x 10.5" W
- Any deviation in this standard size opening must be approved by DIGITAL REALTY TRUST.
- Raised floor cutting and installation services may be requested through DIGITAL REALTY TRUST by approved vendors. The customer will be responsible for all costs.
- No Tile cutting will be allowed on the Turn-Key Datacenter™ floor, surrounding exterior hallways, or any raised floor areas.

I. **REMOVING CEILING TILES**

- The following requirements only apply to shared, common space outside of the Customer leased space. Customer may lift ceiling tiles within their own leased space and will not require an inspection or notice to DIGITAL REALTY TRUST
 - Ceiling tiles are only to be removed by the Building Management staff. Customers and Vendors/Contractors are not allowed to perform ANY work (i.e. cabling, electrical, conduit, etc.) outside the Customers Turn-Key Datacenter™ at any time without the approval of Building Management.



J. PERFORM ANY WORK UNDER THE RAISED FLOORING

- Since under floor smoke detectors are located under the raised floor, all work requiring access to under the raised flooring, authorization must be received by Building Management.
- Any such work shall require the disabling of the fire alarm enunciation, smoke detection and suppression systems.

K. DRILLING

- All work must conform to the Building drilling policy. The use a hammer drill with tool interrupter device or equipment is required if X-rays or Farroscan is not performed. Any locations with Post-Tensioned slabs will require strict review and approval. Contact the Building Management to review the current Construction Policies. Building Management must review and approve all plans prior to any work.
- 2. If drilling is to be performed, an inspected and approved HEPA filtered vacuum cleaner must be used during the drilling to minimize the amount of dust particles emitted into the space.
- Any such work shall require the disabling of the fire alarm enunciation, smoke detection and suppression systems.

VI. CABLE INSTALLATIONS

- **A.** Depending upon the extent of the work, Customer should consider the disabling of the fire alarm enunciation, smoke detection and suppression systems.
- **B.** The following requirements only apply to shared, common space outside of the Customer leased space. Customer cable work inside customer premises is exempt; provided
 - 1. Customer must use good workmanship and engineering practices.
 - 2. No "Customer to Customer" cable connections are permitted between DIGITAL REALTY TRUST Customers in the Turn-Key Datacenter™. Customers are allowed to interconnect between any of their owed equipment and their customer's within their leased premises.
 - The under floor cable management is to be used for all cable runs.
 - Customer may run overhead ladder rack or tray affixed to the top of customer cabinets within customer's premises, as necessary.
 - 5. All cables installations must be secured and bundled together using the approved materials such as wax-coated string, Velcro-ties or plastic tie-straps.
 - Cables are not allowed to extend beyond the rack/tray edges. Cable bundles will be kept in a neat and orderly fashion to maintain workability and appearance.



- All cables must be run on top of the rack/tray and are not allowed to be run underneath them.
- All cable trays or ladder racks must be installed per DIGITAL REALTY TRUST grounding specifications.
- **C.** All cabling under datacenter floor or above drop-in ceiling, must be plenum rated unless installed in conduit directly on location, or a plenum rated inner duct.

VII. COMMUNICATIONS CABLES LABELING STANDARD

- A. Landlord reserves the right to review and approve the pathway and engineering of all DIGITAL REALTY TRUST "Customer to Customer" interconnections. Approval will not be unreasonably withheld. All interconnections must occur in the Building Meet-Me-Room.
- **B.** All cables to and from the Customer space must run in the common area cable management system.
- **C.** If cables extend into DIGITAL REALTY TRUST space, then cables must be labeled according to the following Labeling Standard:
 - Customer conduit runs in common space may be labeled at the ends and junctions only.
 - Tagging of all cables must be performed at the beginning and end points of each
 cable. Cable bundles may be labeled as single units. Customer standard tags are
 acceptable. "Write-on" labels are allowed for the identification of circuits due to the
 potential for change, but must be legible.
 - 3. Tags must have the following:
 - i. Customer name
 - ii. Cage location
 - iii. Interconnection rack area or port number(s)

VIII. ELECTRICAL DISTRIBUTION

- A. The following requirements only apply to the last demarcation point of landlord supplied power (the "Landlord/Customer Demarcation Point"). Demarcation is the output power of the Power Distribution Unit (PDU).
 - All electrical switching will be required to adhere to the DIGITAL REALTY TRUST Change Management Process and will require a Method of Procedure (MOP).
 - 2. Building Management and Engineering will manage all electrical distribution requirements. All electrical distribution installations and/or changes must be specified and approved in advance by Building Management.
 - Building Operations staff will control all main distribution electrical breaker positions. All distribution panels will remain locked at all times. Coordination of breaker operation must be requested by the Customer to the Building



Management, and approved by the Building's Chief Engineer and/or his designated representative, prior to activation.

- **B.** Customers are responsible for any power strips or equipment connected to the UPS circuits within their cage(s) or cabinets.
- C. Customers are responsible for the termination of all DC voltage cabling to Customer fuse panels within their cage(s).
- D. For all work preformed on shared electrical infrastructure, performed by a contractor, under the direction of the customer, will require inspection by Building Management prior to any power activation.
- E. Leases must be fully executed between the Customer and the Landlord prior to electrical circuit activation.
- F. DIGITAL REALTY TRUST can provide quotes for additional electrical installations. If a customer would like to have a contractor of their choice provide this service, the contractor must meet all DIGITAL REALTY TRUST insurance requirements. A list of approved electrical contractors is maintained by the Building Management.

IX. FIRE ALARM/SUPRESSION SYSTEMS

- **A.** Customers are not authorized to tamper with or alter the Building's existing Fire Alarm/Suppression Systems at any time.
- B. The fire suppression system for the Turn-Key Datacenter™ must be disabled for any work, which may cause smoke, odor, or dust, including the use of heat guns. A minimum of five (5) business days advanced written notice to the Building Management office is required and the customer will be responsible for any costs associated for the work to be performed after normal working hours.
- C. All requests for fire suppression system work will be required to follow the DIGITAL REALTY TRUST Change Management process with any supporting documentation also submitted.
- D. Only DIGITAL REALTY TRUST or designated representatives may disable/impair the Fire Alarm/Suppression Systems. A "Fire System Impairment" form will need to be completed and all tasks and notifications must be done as listed in the instructions contained on the form.

E. FIRE SUPPRESSION SYSTEMS

- Pre-action water sprinklers protect the Mission Critical Areas, offices and support spaces. The sprinklers will function automatically when the space temperature exceeds a preset level and the fire detection system is in alarm.
- Some facilities may also have gaseous suppression systems in addition to the preaction system mentioned above. These systems will activate automatically as well.



F. FIRE DETECTION SYSTEMS

- The fire detection system consists of ceiling and under floor mounted smoke detectors. These can be set off by dust or fumes which will in turn activate the fire suppression systems mentioned above.
- 2. Many facilities also employ a VESDA™, Very Early Smoke Detection system, which is capable of detecting the microscopic particles of combustion. Generally air is drawn in through a network of small-bore pipes laid out above or below a ceiling in parallel runs covering a protected area. A VESDA detector will trigger automatic fire response systems.

X. HVAC STANDARDS

Alteration of or tampering with the Building HVAC settings, related airflows or any other HVAC systems within the Turn-Key Datacenter™ is strictly prohibited.

XI. SIGNAGE STANDARDS

The Landlord shall provide the initial signage for each Customer, if requested, using the Building Standard signage. Any additional signs or changes must be approved by the landlord and are subject to additional charges. Landlord must approve any changes requested by any Customer, and all such changes are subject to additional charges.

XII. DELIVERIES

Digital Realty Trust facilities do not have shipping and receiving departments. This policy has been designed to aid our customers in their delivery needs.

All Customer deliveries made to the property must follow the procedures listed below:

- 1. The Vendor and their cargo must be authorized and cleared by Building security.
- The delivery must be received by the Customer or Customer's designee, at the freight dock and immediately deposited by Customer (or such designee) within such Customer's Premises, or in any lockable storage space in the Building that Customer now or hereafter leases from the Building owner in accordance with (and subject to) Item 3, below.
- 3. If available, the Customer may lease lockable storage space in the Building for an additional monthly charge. Additionally, if resources permit, temporary/short term storage may be available from Building Management. Please contact Building Management for more information and with regard to the availability of such space(s).
- 4. As a courtesy to other users of the loading dock(s), whenever large deliveries are expected or the dock area will be blocked for an extended period of time, please coordinate these times with Building Management.
- 5. All Customers are required to ensure delivery and moving companies provide the appropriate insurance certificates to Building Management BEFORE the delivery arrives.



- Any equipment footprint must be reviewed and approved prior to installation and may require the review of a structural engineer. All surfaces (floors, walls, doors, etc.) must be adequately protected while the equipment is moved. These requirements will be at the customers sole cost.
- 7. Customer and Building Engineering will periodically review the Layout Plan, as compared to the actual placement of equipment in the premises, to ensure structural safety and conformity with the Layout Plan.
- Breakdown of all cartons and crating materials should be done in the Building Turn-Key Datacenter™ Storage Area prior to transporting the equipment to the Turn-Key Datacenter™.
- 9. It is the sole responsibility of the customer receiving the shipment to discard all crating material and/or pallets in a timely manner. If the Landlord has to arrange for disposal of said material, the customer will be responsible for all related charges.

Under no circumstances shall the Landlord (or any member of the Landlord Group) be held responsible for the safety or condition of any deliveries.

XIII. WORK SCHEDULING AND PREPARATION

- A. The following requirements only apply to the last demarcation point of landlord supplied power or outside of the Customer's own space (the "Landlord/Customer Demarcation Point"). This would also apply to work requested by Customer that would be considered shared infrastructure.
 - All work (electrical, mechanical, telecommunication, etc.) must conform to the DIGITAL REALTY TRUST Change Management process which will require appropriate supporting documentation such as the "Method of Procedure" (MOP) that provides specific work plans. Before you begin work, all documentation must be completed and approved and you must have received final Change Management approval.
 - All work must conform to the approved MOP. If any additional work is needed or if dates/times change, a new request will need to be submitted for review and approval, before the work can begin.
 - 3. Only Building Management can approve any activity that affects the electrical and mechanical systems of the buildings. Notify Building Management prior to beginning any work for the day and upon completion of the work each day.
 - Power receptacles and other hardware connection points will be identified by Building Management. Vendors/Contractors are not to plug in any hardware, laptops, power tools, or diagnostic equipment without prior approval.
 - Vendor personnel are expected to have their own tools and equipment necessary for their assignment.
 - Cables, tools and accessories are to be properly stowed when work is complete or at the end of each business day.



- All doors, panels and covers will be installed when work is complete or at the end of each business day.
- Vendors/Contractors are not allowed to cut floor tiles without prior approval from an authorized Building Management and never on the raised floor.
- No wires or cables of any sort are to be permanently installed on top of the raised floor.
- Floor tiles are to be re-installed whenever vendor personnel are away from the work area.
- 11. Consult Building Management before placing protective covers over any equipment.
- 12. Arrange all heavy equipment moves with Building Management before you begin.
- 13. Set up protective barriers; for people, equipment and the environment. Protective floor covering (such as masonite) will be used to protect the path of travel as well as the raised floor tile against damage due to equipment.
- 14. Provide 24 hour contact numbers for immediate contact when on-site.
- Building Management will provide more detailed information on any of the above topics, at your request.
- **B.** Vendors/Contractors can perform work, as long as the vendor meets insurance requirements and notifies engineering with an approved Method of Procedure.

XIV. GENERAL SAFETY PRACTICES

- If you observe actual or suspected safety violations, bring these concerns to Building Management immediately.
- Ensure all aisles and exits are free of obstructions.
- The procedures for reporting and responding to a medical emergency can be provided by Building Management

XV. EQUIPMENT INSTALLATION

- A. The following requirements only apply to the last demarcation point of landlord supplied power or outside of the Customer's own space (the "Landlord/Customer Demarcation Point"). This would also apply to work requested by Customer that would be considered shared infrastructure
 - Additions of ladder racks, cable management tray, fiber guide and floor tile within/above/below any Customer caged areas must be pre-approved by the Building Management and match the existing system in-place.



- **B.** All connection points must be "bonded" between sections to maintain the integrity of the existing rack/tray system including appropriate grounding (reference DIGITAL REALTY TRUST Signal Reference Grid standards).
- C. To ensure effective grounding, the paint must be removed down to the bare metal and Customer agrees to install according to common practices and/or manufacturer instructions in order to provide a metal contact point for the bonding connection(s).
- D. The frames of all cabinets, PDU's, CRAC'S, etc. installed in the Turn-Key Datacenter™ must be bonded to the single reference grid (SRG) located under the raised floor.
- E. PDU's, CRAC's, etc, will not be installed directly to the Turn-Key Datacenter™ raised floor. The use of manufacturer specified floor stands are required and all equipment will be anchored to the slab via mechanical fasteners.

XVI. HOUSEKEEPING

- A. Customers are expected to keep their area neat and clean. Contact Building Management for any issues or assistance.
 - 1. Unpack equipment outside the computer room and dispose of the combustibles.
 - 2. Storage of combustible material on the raised floor is never allowed.
 - Replace all ceiling and floor tiles removed for access, before leaving the site over the night or weekend.
 - 4. Cut tile and cables outside the raised floor area and properly dispose of all waste.
 - 5. Never leave an area with dirt and debris, even temporarily. Remove dust or dirt immediately.
 - 6. All vacuums used must have a HEPA filter on the discharge and must be inspected and approved by Building Operations staff.
 - 7. Report any spills or fire hazards so corrective action can be taken.
 - 8. No food or drink is allowed in the raised floor areas of the buildings.

XVII. TRASH REMOVAL

- **A.** Customers may request trash removal from the Turn-Key Datacenter™ by contacting Building Management.
 - In the event that Customer requests removal by Building Management, Customer should label the trash and provide in as tidy of a pile as possible outside of the cage.
 - Once equipment is unpacked, all cardboard boxes are to be removed from the Turn-Key Datacenter™ either by Customer, or in connection with item A. (above). Always dispose (or cause the disposal) of all combustibles.



- At no time will wooden pallets or spools be allowed to remain in the Turn-Key Datacenter™ as they are a fire hazard.
- 4. Report any spills or fire hazards so corrective action can be taken.

XVIII. EMERGENCY POWER-OFF (EPO)

- A. Emergency power-off (EPO) buttons are located adjacent to the exit doors within the Turn-Key Datacenter™ for use in an emergency situation where the shutdown of power and cooling is necessary to prevent loss of life or to prevent the spread of a significant electrical fire.
- B. Turn off all power and cooling to all server equipment within the Turn-Key Datacenter™.

XIX. APPROVED LABELING AND BINDING MATERIALS



APPROVED CABLE IDENTIFICATION METHODS





APPROVED CABLE AND ELECTRICAL CIRCUIT IDENTIFICATION METHODS

