

BASIS OF DESIGN - RETAIL STORE TENANT RETROFIT WITHIN A SHOPPING MALL Date: October 2015 Project Name: Tenant Fitout In Mall Project #: 2015-10 Prepared By: Reader Revision date: **BUILDING** ■ New Construction ■ Renovation ■ Addition Sq. Ft.:_ ☐ Infrastructure Expansion No. of floors below grade:_ No. of floors at and above grade: UTILITIES Electrical: New Upgrade Existing Gas: New Upgrade Existing Steam: New Upgrade Peplace Chilled Water: New Upgrade Existing Hot Water: A New Dupgrade Existing Teriminal Units: New Dupgrade Existing Air Systems to Tenant Space: ☐ Supply Air ☐ Return Air ☐ Outdoor Air ☐ Exhaust Services from Utility of: 🗆 Electric 🗅 Gas 🗅 District Energy 🗅 Existing Campus Power Plant: 🗀 Electric 🗀 Gas 🗅 Steam 🗀 CHWS 🗀 Hot Water 🗅 None **UTILITY DESIGN PARAMETERS Electrical:** □ 120/1/60 □ 208/3/60 □ 277/3/60 □ 480/3/60 □ ____/3/60 Emergency Power: 🗆 New 🗀 Diesel oil 🗀 Gas 🗀 Existing 🗀 None 🛮 Gas: 🗀 Design Parameters by Plumbing Engineer 🗀 None Steam Pressure: Low @ __psig Lo **Chilled Water Temperature:** \square CHWS @ <u>46</u>°F & CHWR @ <u>58</u>°F \square None Condenser Water Temperature: ☐ CWS @ °F & CWR @ °F ☐ None Hot Water Temperature: 🗆 HWS @ 160°F & HWR @ 120°F when 17°F OAT and 105°F HWS & 85°F @ 60°F with Boilers Off when OAT is 60°F 🖵 Fixed HWS @ ___F & HWR @ ___F 🖵 None ASHRAE APPLICATION HANDBOOK ASHRAE 2015 Handbook: Chapter [] ASHRAE 2012 Handbook: Chapter [] [] [] **OWNER MECHANICAL DESIGN PARAMETERS Equipment Location:** On floor being served Above floor being served Central Equipment room(s) ☐ In penthouse ☐ On roof Maintenance Outside Occupied Space: ☐ Yes Serving primary HVAC equipment ☐ No **Redundancy:** □ For (*List Equipment*) □ N+? □ No **Equipment/System Expansion:** ☐ Increase equipment size by __% ☐ No **Indoor Air Quality at:** MERV rating of □ for pre-filters MERV rating of □ for final filters Acoustic & Vibration Criteria: Design parameters by acoustic consultant None Specialty Room(s): \Box _(List Room) 🖵 None Occupancy Schedule: ☐ 24-7-365 ☐ Occupied/Unoccupied (List Hours of Occupancy) ☐ None **DESIGN CRITERIA** Outdoor Dry Bulb & Wet Bulb:_____ F Heating season _°F/____°F Cooling season Tenant Space: ☐ Occupied-unoccupied ☐ 24-7 occupied ☐ Unoccupied period ☐ Warm-up & cool down **Set Point:** __°F Heating Season & __°F <__%RH Cooling Season Mechanical & Electrical Space and Back of the House Area: 🗅 Occupied-unoccupied 🚨 24-7 🚨 Unoccupied period 📮 Warm-up & cool down 🖵 NA **Set Point:**___°F Heating season and °F/___°F Cooling season 📮 Not applicable **ENERGY & ENVIRONMENT CRITERIA LEED Certification:** □ Yes □ No □ Other certification (*List the program*) Annual Operating Budget: ☐ Energy budget ☐ Organization structure ☐ Outsource Refer To "The Facility Files" For Additional Operation & Maintenance Design Criteria **SPECIAL CONDITIONS & REQUIREMENTS** 2.

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