

BASIS OF DESIGN - MULTIPLEX MOVIE THEATER PROJECT Date: <u>December 2015</u> Project Name: <u>Multiplex Movie Theater Project</u> Project #: 2015-01 Prepared By: <u>Reader</u> BUILDING ■ New Construction ☐ Renovation ☐ Addition Sq. Ft.:_ No. of floors below grade:_ No. of floors at and above grade: **UTILITIES** Electrical: New Upgrade Existing Gas: New Upgrade Existing Steam: New Upgrade Existing Chilled Water: New Upgrade Existing Hot Water: ☐ New ☐ Upgrade ☐ Existing Services from Utility of: 🗆 Electric 🗀 Gas 🗅 District Energy 🗀 Existing Campus Power Plant: 🗀 Electric 🗀 Gas 🗔 Steam 🗀 CHWS 🗀 CWS 🗀 Hot Water 🗀 None **UTILITY DESIGN PARAMETERS Electrical:** □ 120/1/60 □ 208/3/60 □ 277/3/60 □ 480/3/60 □ Emergency Power: ☐ New ☐ Diesel oil ☐ Gas ☐ Existing ☐ None Gas: Design Parameters by Plumbing Engineer Steam Pressure: Low @ __psig Chilled Water Temperature: ☐ CHWS @ 42°F & CHWR @ 56°F ☐ None Condenser Water Temperature: ☐ CWS @ 85°F & CWR @ 95°F ☐ None Hot Water Temperature: 🗆 HWS @ 160°F & HWR @ 120°F when 16°F OAT and 90°F HWR 70°F when OAT is 60°F 🚨 Fixed HWS @ ___°F & HWR @ ___°F 🚨 None **ASHRAE APPLICATION HANDBOOK** ASHRAE 2015 Handbook: [] Other Chapters: [] Yes [] No ASHRAE 2012 Handbook: Chapter [] [] [] **OWNER MECHANICAL DESIGN PARAMETERS** Equipment Location: 🗆 On floor being served 🚨 In central equipment room(s) 🗖 On roof 📮 In penthouse 📮 Away from building Maintenance Outside Occupied Space: ☐ Yes ☐ No **Redundancy:** \square For new central air-handlers \square N+? \square No **Equipment/System Expansion:** ☐ Increase equipment size by __% ☐ No Indoor Air Quality at: MERV rating of [] for pre-filters MERV rating of [] for final filter Additional Consultants Design Parameters: ☐ Acoustics ☐ Security ☐ Infection **Specialty Room(s):** ☐ For Basement Special Room ☐ None **DESIGN CRITERIA** Outdoor Dry Bulb & Wet Bulb:__ _°F Heating season _°F Cooling season Public/Common Area & Theaters: Occupied period unoccupied period Warm-up & cool down Operate 24-7 year-round **Set Point:** __°F Heating Season & __°F and <__%RH Cooling Season Occupancy Schedule: 24-7-365 Occupied/unoccupied Mechanical & Electrical Space and Back of the House Area: 🗅 Occupied period 🗅 Unoccupied period 🗅 Warm-up & cool down 🗔 24-7 year-round Set Point:___°F Heating season & ___°F< __% RH Cooling season Occupancy Schedule: 24-7-365 Occupied/unoccupied Building space pressure: [+] [-] [=] at _____ **ENERGY & ENVIRONMENT CRITERIA LEED Certification:** ☐ Yes ☐ No ☐ Other certification (*List the program*) **Annual Operating Budget:** Energy budget Organization structure Refer To "The Facility Files" For Additional Operation & Maintenance Design Criteria

To view the solution online, please visit www.esmagazine.com.

SPECIAL CONDITIONS & REQUIREMENTS