

# CSU FACILITIES PLANNING, DESIGN AND CONSTRUCTION STANDARDS

## ADDITIONAL DOCUMENTS

---

### ABBREVIATIONS

#### A

A	Air/Amperes/Architectural
A/C	Air Conditioning (also: AC)
A/E	Architect/Engineer
AABC	Association Air Balance Council
AATCC	American Association of Textile Chemists & Colorists
AB	Anchor Bolt
ABB	Asea Brown Boveri
ABS	Acrylonitrile Butadiene Styrene
AC	Air Conditioning (also: A/C)/Alternating Current
ACD	Automatic Control Damper
ACH	Air Changes per Hour
ACI	American Concrete Institute
ACM	Asbestos Containing Materials
ACNS	Academic Computing and Networking Services
ACT	Acoustic Ceiling Tile
AD	Access Door/Area Drain
ADA	Americans with Disabilities Act
ADO	Automatic Door Operator
AED	Automated External Defibrillator
AF	Air Foil
AFCI	Arc Fault Circuit Interrupter
AFF	Above Finished Floor
AHU	Air Handling Unit
AIA	American Institute of Architects
AIC	Ampere Interrupting Capacity
AIHA	American Industrial Hygienist Association
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction
AL	Aluminum (also: ALUM)
ALCC	Association of Landscape Contractors of Colorado
ALUM	Aluminum (also: AL)
AMCA	Air Movement and Control Association
AMI	Advanced Metering Infrastructure
AMP	Ampere
AMRL	AASHTO Materials Reference Laboratory
ANOD	Anodized
ANSI	American National Standard Institute
AP	Access Panel
APD	Air Pressure Drop
ARI	American Refrigeration Institute
AS	Air Stream
ASD	Allowable Stress Design
ASHRAE	American Society of Heating, Refrigeration & Air Conditioning Engineers
ASI	Architectural Supplemental Information
ASME	American Society of Mechanical Engineers
ASNT	American Society for Nondestructive Testing
ASTM	American Society for Testing & Materials
ATC	Automatic Temperature Control
ATM	Atmosphere

## CSU FACILITIES PLANNING, DESIGN AND CONSTRUCTION STANDARDS

### ADDITIONAL DOCUMENTS

---

ATS .....	Automatic Transfer Switch
AWG .....	American Wire Gauge
AWS .....	American Welding Society
AWWA .....	American Water Works Association

### B

B .....	Bottom (also: BOT)
BAS .....	Building Automation System/Building Automation Services
BCSI .....	Building Component Safety Information
BD .....	Bid Documents
BDD .....	Back-Draft Damper
BHP .....	Brake Horsepower
BI .....	Backwards Inclined
BIA .....	Brick Institute of America
BIM .....	Building Information Modeling
BIR .....	Building Inspection Record
BLK .....	Block
BM .....	Beam
BOD .....	Basis of Design/Bottom of Duct
BOF .....	Bottom of Foundation
BOG .....	Board of Governors
BOT .....	Bottom (also: B)
BRG .....	Bearing
BRKT .....	Bracket
BSMT .....	Basement
BT .....	Bath Tub
BTU .....	British Thermal Units
BTUH .....	British Thermal Units per Hour
BV .....	Binary Value
BWV .....	Back Water Valve
BYND .....	Beyond

### C

C .....	Civil/Conduit
C/B .....	Circuit Breaker
CA .....	Compressed Air
CAD .....	Computer Assisted/Aided Drafting
CAR .....	Corrective Action Report
CAS .....	Card Access System
CATV .....	Cable Television/Community Antennae Television
CB .....	Change Bulletin/Critical Branch
CBM .....	Certified Ballast Manufacturer
CC .....	Center of Tree Center
CCD .....	Conformed Contract Documents
CCHE .....	Colorado Commission on Higher Education
CCR .....	Code of Colorado Regulations
CCRL .....	Cement and Concrete Reference Laboratory
CCT .....	Circuit (also: CIR, CKT)
CCTV .....	Closed Circuit Television
CD .....	Candela/Construction Documents
CDC .....	Center for Disease Control
CDLE .....	Colorado Department of Labor and Employment

## CSU FACILITIES PLANNING, DESIGN AND CONSTRUCTION STANDARDS

### ADDITIONAL DOCUMENTS

---

CDPHE	Colorado Department of Public Health & Environment
CDSR	Contract Data Submittal Report
CE	Center of Tree Edge
CENT	Center/Centrifugal
CF	Cubic Feet
CF/cf	Cubic Feet
CFC	Chlorofluorocarbon
CFH	Cubic Feet per Hour
CFM	Cubic Feet per Minute
CFM/cfm	Cubic Feet per Minute
CH	Chilled/Chiller
CHNL	Channel
CHW	Chilled Water
CHWP	Chilled Water Pump
CHWR	Chilled Water Return
CHWS	Chilled Water Supply
CI	Cast Iron
CIP	Cast-In-Place/Clean-in-Place
CIR	Circuit (also: CCT, CKT)
CJ	Control Joint
CKT	Circuit (also: CCT, CIR)
CL	Center Line
CLDI	Cement Lined Ductile Iron
CLF	Current Limiting Fuse
CLG	Ceiling
CLR	Clear
CMU	Concrete Masonry Unit
CO	Carbon Monoxide/Change Order/Cleanout
COB	Change Order Bulletin/Close of Business
COL	Column
COMPR	Compressible
CONC	Concrete
CONN	Connection
CONST JT	Construction Joint
CONT	Continuous
CP	Chrome Plated
CPM	Critical Path Method
CPT	Carpet/Control Power Transformer
CQC	Contractor Quality Control
CRI	Color Rendering Index
CRS	Colorado Revised Statutes
CRSI	Concrete Reinforcing Steel Institute
CSA	Canadian Standards Association
CSI	Construction Specifications Institute
CSU	Colorado State University
CSUPD	Colorado State University Police Department
CT	Ceramic Tile/Cooling Tower/Current Transformer
CTBD	Cooling Tower Blow Down
CTE	Connect to Existing
CTYD	Courtyard
CU	Copper
CUH	Cabinet Unit Heater
CW	Cold Water
CWR	Cold Water Return/Condenser Water Return

# CSU FACILITIES PLANNING, DESIGN AND CONSTRUCTION STANDARDS

## ADDITIONAL DOCUMENTS

---

CWS.....Cold Water Supply/Condenser Water Supply

### D

D.....Drain  
dB.....Decibel(s)  
DB.....Dry Bulb  
DBL.....Double  
DC.....Direct Current  
DCVA.....Double Check Valve Assembly  
DD.....Design Development  
DDC.....Direct Digital Control  
DEG.....Degree  
DEMO.....Demolish/Demolition  
DEPR.....Depression  
DET.....Detail  
DF.....Drinking Fountain  
DI.....Deionized Water  
DIA.....Diameter  
DIM.....Dimension  
DIMS.....Dimensions  
DIP.....Ductile Iron Pipe  
DIR.....Direction  
DL.....Development Length  
DN.....Down  
DOT.....Department of Transportation  
DP.....Differential Pressure  
DR.....Door  
DRC.....Design Review Committee  
DT/DV.....Differential Time/Differential Voltage  
DWG.....Drawing (AutoCAD format)  
DWLS.....Dowels

### E

E.....Electrical (also: ELEC)  
EA.....Each/Exhaust Air  
EAHU.....Exhaust Air Handling Unit  
EAT.....Entering Air Temperature  
EB.....Equipment Branch  
EC.....Electrical Code/Electrical Contractor  
ECM.....Electrically Commutated Motor  
EE.....Each End/Edge of Tree to Edge  
EF.....Exhaust Fan  
EFCO.....Emergency Field Change Order  
EHS.....Environmental Health Services  
EJ.....Expansion Joint  
EL.....Elevation (also: ELEV)  
ELEC.....Electrical (also: E)  
ELEV.....Elevation (also: EL)/Elevator  
EM.....Emergency (also: EMER)  
EMER.....Emergency (also: EM)  
EMI.....Electrical Magnetic Interference  
EMS.....Energy Management System

## CSU FACILITIES PLANNING, DESIGN AND CONSTRUCTION STANDARDS

### ADDITIONAL DOCUMENTS

---

EMT .....	Electrical Metallic Tubing
ENT .....	Electrical Nonmetallic Tubing
EOL .....	End of Line Resistor
EP .....	Emergency Power
EPA .....	Environmental Protection Agency
EPD .....	Environmental Product Declarations
EPDM .....	Ethylene Propylene Diene M-Class (Roofing)
EPO .....	Emergency Power Off (Button or Switch)
EQ .....	Equal
ERV .....	Energy Recovery Ventilator
ESP .....	External Static Pressure
ET .....	Expansion Tank
EUH .....	Electrical Unit Heater
EWC .....	Electric Water Cooler (Drinking Fountain)
EWT .....	Entering Water Temperature
EX .....	Exhaust (also: EXH)
EXH .....	Exhaust (also: EX)
EXIST .....	Existing
EXP .....	Expansion
EXP Bolt .....	Expansion Bolt
EXP JT .....	Expansion Joint
EXT .....	Exterior/External

### F

F .....	Fahrenheit/Fuse
FA .....	Fire Alarm/Fire Area
FAA .....	Fire Alarm Annunciator
FACP .....	Fire Alarm Control Panel
FACU .....	Fire Alarm Control Unit
FAS .....	Fire Alarm System
FC .....	Flexible Connection
FCO .....	Floor Cleanout
FCU .....	Fan Coil Unit
FD .....	Fire Damper/Fire Department/Floor Drain
FDC .....	Fire Department Connection
FEC .....	Fire Extinguisher Cabinet
FF .....	Finished Face/Finished Floor
FFL .....	Finished Floor Level
FHC .....	Fire Hose Cabinet
FHV .....	Fire Hose Valve
FICM .....	Postsecondary Education Facilities Inventory and Classification Manual
FIN .....	Finish
FIXT .....	Fixture
FL .....	Floor (also: FLR)
FLA .....	Full Load Amperes
FLEX .....	Flexible
FLR .....	Floor (also: FL)
FLRDR .....	Floor Drain
FM .....	Facilities Management/Factory Manual/Filled Metal
FMC .....	Flexible Metal Conduit
FND .....	Foundation
FO .....	Face Of
FP .....	Fire Protection

# CSU FACILITIES PLANNING, DESIGN AND CONSTRUCTION STANDARDS

## ADDITIONAL DOCUMENTS

---

FPHE.....	Flat Plate Heat Exchanger
FPM.....	Feet per Minute
FPS.....	Feet per Second
FPWH.....	Freeze Proof Wall Hydrant
FR.....	Flame Retardant
FRP.....	Fiberglass Reinforced Plastic
FS.....	Flow Switch/Food Service
FT/ft.....	Feet/Foot (also: ')
FTG.....	Footing
FTR.....	Fin Tube Radiation
FV.....	Flush Valve

## G

G.....	Gas/General/Ground
GA.....	Gauge
GAL.....	Gallon(s)
GALV.....	Galvanized
GB.....	Grade Beam
GCC.....	General Conditions of Contract
GCO.....	Ground Clean Out
GE.....	General Electric
GFCI.....	Ground Fault Circuit Interrupter (also: GFI)
GFI.....	General Fault Indicator/Ground Fault Circuit Interrupter (also: GFCI)
GFU.....	Glycol Feed Unit
GI.....	Grease Interceptor
GIS.....	Geographic Information System
GND.....	Ground
GP.....	Gusset Plate
GPF.....	Gallons per Flush
GPH.....	Gallons per Hour
GPM.....	Gallons per Minute
GR.....	Grade
GRMC.....	Galvanized Rigid Metal Conduit
GSF.....	Gross Square Feet
GWB.....	Gypsum Wall Board
GWP.....	Global Warming Potential

## H

HB.....	Hose Bib (Connection)
HBRB.....	Historic Building Review Board
HC.....	Handicapped/Hollow Core
HD.....	Head
HDS.....	Housing and Dining Services/Facilities
HEF.....	Horizontal Each Face
HEPA.....	High Efficiency Particulate Air
HHS.....	Health and Human Services
HI.....	High
HIF.....	Horizontal Inside Face
HM.....	Hollow Metal
HOA.....	Hand-Off-Automatic Switch
HOF.....	Horizontal Outside Face
HOR.....	Horizontal

# CSU FACILITIES PLANNING, DESIGN AND CONSTRUCTION STANDARDS

## ADDITIONAL DOCUMENTS

---

HP/hp .....	High Point/Horsepower
HR/hr .....	Hour
HRU.....	Heat Recovery Unit
HS .....	High Strength
HT.....	Height
HTG.....	Heating
HVAC .....	Heating, Ventilation, Air Conditioning
HW .....	Hot Water
HWP.....	Hot Water Pump
HWR.....	Hot Water Return
HWS.....	Hot Water Supply
HZ.....	Hertz (Cycles per Second)

### I

IA .....	Irrigation Association
IAPMO.....	International Association of Plumbing & Mechanical Officials
IBC .....	International Building Code
ICBO.....	International Conference of Building Officials
ICC .....	International Code Council
ID.....	Inside Diameter
IDC.....	Indicating Device Circuits
IDF.....	Intermediate Distribution Frame
IECC.....	International Energy Conservation Code
IEEE .....	Institute of Electrical & Electronic Engineers
IES.....	Illuminating Engineering Society
IFC.....	International Fire Code
IG.....	Isolated Ground
IGBT .....	Insulated Gate Bipolar Transistor
ILO.....	In Lieu Of
IMC.....	Intermediate Metal Conduit
IN/in .....	Inch (also: ")
INSUL.....	Insulated or Insulation
INT.....	Interior/Interlock
INV .....	Invert
IO&M .....	Installation, Operation, and Maintenance Manuals
IPC .....	International Plumbing Code
IPVCC .....	Inclusive Physical and Virtual Campus Committee
IRGWB .....	Impact Resistant Gypsum Wall Board
ISO .....	International Organization for Standardization
IW .....	Indirect Waste

### J

J-BOX .....	Junction Box.
JCI.....	Johnson Control, Inc.
JST .....	Joist
JT .....	Joint

### K

K.....	Kip (1000 Pounds)
KCMIL .....	Thousand Circular Mills
KVA .....	Kilovolt–Amperes

## CSU FACILITIES PLANNING, DESIGN AND CONSTRUCTION STANDARDS

### ADDITIONAL DOCUMENTS

---

KVAR.....	Kilovolt–Amperes Reactive
kW.....	Kilowatt
kWh.....	Kilowatt Hour

#### L

L.....	Landscape
LACS.....	Laboratory Airflow Control Systems
LAT.....	Leaving Air Temperature
LB.....	Pound
LCD.....	Liquid Crystal Display
LD.....	Linear Diffuser
LED.....	Light Emitting Diode
LEED.....	Leadership in Energy and Environmental Design
LF/lf.....	Linear Foot
LFMC.....	Liquid Tight Flexible Metal Conduit
LIN.....	Linear
LLV.....	Long Leg Vertical
LO.....	Low
LP.....	Low Point
LPG.....	Liquid Petroleum Gas
LPS.....	Low Pressure Steam
LRA.....	Locked Rotor Amps
LRFD.....	Load and Resistance Factor Design
LTG.....	Lighting
LUVR.....	Louver (also: LVR)
LVDL.....	Lab Ventilation Design Level
LVDR.....	Louvered Door
LVG.....	Leaving
LVT.....	Luxury Vinyl Tile
LVR.....	Louver (also: LUVR)
LW.....	Light Weight
LWC.....	Light Weight Concrete
LWT.....	Leaving Water Temperature

#### M

M.....	Mechanical (also: MECH)
MAS.....	Masonry
MAX.....	Maximum
MBH.....	1000 BTUH
MBtu.....	Thousand British Thermal Units
MC.....	Metal Clad Cable
MCA.....	Minimum Circuit Amps
MCB.....	Main Circuit Breaker
MCC.....	Motor Control Center
MCP.....	Motor Circuit Protection
MD.....	Motorized Damper
MDF.....	Main Distribution Frame
MDP.....	Medium Density Industrial Particle Board
MECH.....	Mechanical (also: M)
MEMBR.....	Membrane
MI.....	Mineral Insulated
mils.....	One Thousands of an Inch



## CSU FACILITIES PLANNING, DESIGN AND CONSTRUCTION STANDARDS

### ADDITIONAL DOCUMENTS

---

MIN.....	Minimum
MLO.....	Main Lugs Only
MO.....	Masonry Opening
MP.....	Mapping
MPC.....	Master Plan Committee
MRGWB.....	Moisture-Resistant Gypsum Wall Board
MRL.....	Machine Room-Less
MS.....	Microsoft
MSB.....	Mop Service Basin
MSDS.....	Material Safety Data Sheet
MTL.....	Metal
MU.....	Make-Up Water
MUA.....	Make-Up Air
MUTCD.....	Manual on Uniform Traffic Control Devices
MW.....	Megawatt

### N

NAC.....	Notification Appliance Circuits
NANSR.....	Non-Attainment New Source Review
NASF.....	Net Assignable Square Feet
NC.....	Noise Criteria/Normally Closed
NCMA.....	National Concrete Masonry Association
NCR.....	Nonconformance Report
NCS.....	National CAD Standard
NEBB.....	National Environmental Balancing Bureau
NEC.....	National Electrical Code
NEII.....	National Electrical Illumination Institute
NEMA.....	National Electrical Manufacturers Association
NF.....	Near Face
NFPA.....	National Fire Protection Association
NIC.....	Not in Contract
NICET.....	National Institute for Certification in Engineering Technologies
NIH.....	National Institute of Health
NIST.....	National Institute of Standards and Technology
NL.....	Night Light
NM.....	Non-Metallic
NM-C.....	Non-Metallic Cable
NO.....	Normally Open/Number
NOM.....	Nominal
NRMCA.....	National Ready Mixed Concrete Association
NSF.....	National Sanitation Foundation
NTP.....	Notice to Proceed
NTS.....	Not to Scale
NWC.....	Normal Weight Concrete

### O

O&M.....	Operations & Maintenance Manual
OA.....	Outside Air
OAT.....	Outside Air Temperature
OAC.....	Owner, Architect and Contractor
OAI.....	Outside Air Intake
OC/oc.....	On Center

## CSU FACILITIES PLANNING, DESIGN AND CONSTRUCTION STANDARDS

### ADDITIONAL DOCUMENTS

---

OD	Outside Diameter
ODP	Open Drip Proof/Ozone Depletion Potential
OED	Open End Drain
OH	Opposite Hand(also: OPP)/Overhang
OOS	Out of Service
OPNG	Opening
OPC	Open Platform Communication
OPP	Opposite/Opposite Hand
OPR	Owner Project Requirements
OPS	Division of Oil and Public Safety
ORP	Oxidation–Reduction Potential
OS&Y	Outside Stem and Yoke
OSA	Office of the State Architect/Outside Air
OSHA	Occupational Safety & Health Administration
OV	Outlet Velocity
OZ	Ounce

### P

P	Plumbing (also: PLBG, PLUMB)/Pole
PB	Panic Button/Pull Box/Push Button
PC	Pile Cap
PC	Personal Computer
PCA	Portland Cement Association
PCC	Pre–Cast Concrete
PCF	Pounds per Cubic Foot
PD	Pressure Drop
PDC	Physical Development Committee
PDF	Portable Document Format
PE	Polyethylene
PE	Professional Engineer
PFA	Poudre Fire Authority
PH	Phase
PICV	Pressure Independent Control Valve
PIV	Post Indicator Valve
PL	Planning Documents/Plate
PLBG	Plumbing (also: P, PLUMB)
PLUMB	Plumbing (also: P, PLBG)
PLYD	Plywood
PNL	Panel
PNT	Paint or Painted
PRV	Pressure Reducing Valve
PS	Pull Station
PSD	Prevention of Significant Deterioration
PSF	Pounds per Square Foot
PSI	Pounds per Square Inch
PSI	Pounds per Square Inch
PSIA	Pounds per Square Inch – Absolute
PSID	Pounds per Square Inch – Differential
PSIG	Pounds per Square Inch – Gauge
PT	Point/Potential Transformer/Pressure Treated
PTS	Parking Transportation Services
PVC	Polyvinyl Chloride
PWR	Power

## CSU FACILITIES PLANNING, DESIGN AND CONSTRUCTION STANDARDS

### ADDITIONAL DOCUMENTS

---

#### Q

QR..... Quick Response  
QTY..... Quantity

#### R

R..... Radius  
RA..... Return Air  
RAR..... Remedial Action Request  
RBR..... Rubber  
RCCB, RCB..... Residual–Current Circuit Breaker  
RCD..... Residual–Current Device  
RCP..... Reflected Ceiling Plan  
RCP..... Reinforced Concrete Pipe  
RCV..... Remote Control Valve  
RD..... Record Drawings/Roof Drain  
RE..... Right End  
REINF..... Reinforced  
REQ..... Required (also: REQD)  
REQD..... Required (also: REQ)  
RET..... Return  
RETG..... Retaining  
RFI..... Radio Frequency Interference/Request for Information  
RH..... Relative Humidity  
RL..... Redline  
RLA..... Running Load Amps  
RLF..... Relief  
RM..... Room  
RMC..... Rigid Metal Conduit  
RMI..... Risk Management & Insurance  
RMS..... Root Mean Squared  
RNC..... Rigid Non–Metallic Conduit  
RPBP..... Reduced Pressure Backflow Preventer  
RPM..... Revolutions per Minute  
RS..... Recommended Standard  
RTS..... Remote Test Station  
RTU..... Roof Top Unit

#### S

S..... Structural  
SA..... Shock Absorber/Supply Air  
SBP..... State Buildings Program  
SC..... Shear Connector  
SCM..... Stormwater Control Measures  
SCR..... Screen  
SCR..... Silicone Control Rectifiers  
SCT..... Saturated Condensing Temperature  
SD..... Sanitary Drain/Schematic Design/Smoke Damper/Smoke Detector  
SDI..... Steel Deck Institute  
SE..... Service Entrance/Smoke Exhaust  
SEAC..... Structural Engineers Association of Colorado  
SEB..... Service End Line Box or Service Electrical Box

## CSU FACILITIES PLANNING, DESIGN AND CONSTRUCTION STANDARDS

### ADDITIONAL DOCUMENTS

---

SECT .....	Section
SEFA .....	Scientific Equipment and Furniture Association
SEN .....	Sensible
SF/sf .....	Square Feet/Square Foot/Step Footing
SFD .....	Combination Smoke/Fire Damper
SGC .....	Supplementary General Conditions
SH .....	Shower (also: SHWR)/Shop Drawings
SHC .....	Sensible Heat Capacity
SHT .....	Sheet
SHWR .....	Shower (also: SH)
SIM .....	Similar
SIN .....	Sprinkler Information Number
SJI .....	Steel Joist Institute
SK .....	Sink
SL .....	Splice Length
SLC .....	Signaling Line Circuits
SLV .....	Short Leg Vertical
SMACNA .....	Sheet Metal and Air Conditioning Contractors National Association
SOG .....	Slab on Grade
SP .....	Spare/Stand Pipe/Static Pressure
SPEC .....	Specification/Specified
SPK .....	Speaker/Sprinkler
SQ .....	Square
SS .....	Soil Stack/Stainless Steel (also: SSTL)
SSTL .....	Stainless Steel (also: SS)
ST .....	Shunt Trip
STC .....	Sound Transmission Coefficient
STD .....	Standard
STIFF .....	Stiffener
STL .....	Steel
STR .....	Structural (also: STRUCT)
STRUCT .....	Structural (also: STR)/Structure
SUP .....	Supply
SW .....	Switch
SWP .....	Standard Working Pressure
SYM .....	Symmetrical

### T

T .....	Technology/Telecommunications/Temperature/Thermostat/Top
T&B .....	Top and Bottom
T&G .....	Tongue and Groove
T/D .....	Telephone/Data
TAB .....	Testing, Adjusting & Balancing
TCP .....	Traffic Control Plan
TEFC .....	Totally Enclosed Fan Cooled
TEL .....	Telephone (also: TELE)
TELE .....	Telephone (also: TEL)
TEMP .....	Temperature
TFE .....	Teflon
TGB .....	Telecommunications Grounding Busbar
THHN .....	Thermoplastic High Heat-resistant Nylon-coated
THK .....	Thick/Thickness
THRD .....	Threaded

## CSU FACILITIES PLANNING, DESIGN AND CONSTRUCTION STANDARDS

### ADDITIONAL DOCUMENTS

---

TLT .....	Toilet
TMCB .....	Thermal Magnetic Circuit Breaker
TME .....	To Match Existing
TO .....	Top of
TOC .....	Table of Contents/Top of Concrete
TOF .....	Top of Foundation
TON .....	12,000 BTUH (Cooling Capacity)
TOS .....	Top of Steel
TOW .....	Top of Wall
TPD .....	Toilet Paper Dispenser
TPI .....	Truss Plate Institute
TPO .....	Thermoplastic Olefin
TS .....	Tamper Switch
TSI .....	Thermal/Mechanical System Insulation
TSP .....	Total Static Pressure
TSTAT .....	Thermostat
TVSS .....	Transient Voltage Surge Suppression
TW .....	Tempered Water
TYP .....	Typical

### U

U .....	Urinal/Utility
U/S .....	Underside (also:US)
UAS .....	Unmanned Aircraft System
UC .....	Undercut (Door)
UF .....	Underground Feeder
UFC .....	Uniform Fire Code
UG .....	Under Ground
UHF .....	Ultra High Frequency
UL .....	Underwriters Laboratory
UNO .....	Unless Noted Otherwise
UPS .....	Uninterruptible Power Supply
US .....	Underside (also: U/S)
USDA .....	United States Department of Agriculture
UTM .....	Universal Transverse Mercator

### V

V .....	Vent/Volt(s)
VA .....	Volt–Ampere
VAV .....	Variable Air Volume
VB .....	Vacuum Breaker
VD .....	Volume Damper
VEF .....	Vertical Each Face
VEL .....	Velocity
VFD .....	Variable Frequency Drive
VIF .....	Verify in Field/Vertical Inside Face
VOF .....	Vertical Outside Face
VP .....	Vision Panel
VPUO .....	Vice President of University Operations
VS .....	Vent Stack
VT .....	Voltage Transformer
VTR .....	Vent Through Roof

# CSU FACILITIES PLANNING, DESIGN AND CONSTRUCTION STANDARDS

## ADDITIONAL DOCUMENTS

---

### W

W	Waste/Watt/Wayfinding/Wire
W/	With
WB	Wet Bulb
WC	Water Closet
WD	Wood
WG	Water Gauge
WH	Wall Hydrant/Water Heater
WOG	Water, Oil or Gas
WP	Waterproof/Weatherproof/Working Point
WPD	Water Pressure Drop
WS	Waste Stack
WTD	Water Temperature Difference
WWF	Welded Wire Fabric

### X

XFMR	Transformer
------	-------------

### Symbol/Numeric

Φ	Phase
Ω	Ohm
"	Inch (also: IN/in)
'	Feet (also: FT/ft)
#	Pound Number
&	And
@	At
2D	Two Dimension
3D	Three Dimension
°F	Degrees Fahrenheit