[0101] Codes

Contents

[1] Project Summary

This report **describes** the structural design of a solar canopy *covering* a residential patio located in the City of Larkspur, California. It includes the design of a concrete slab and *stem* wall, steel tube frame, and clip attachments of solar panels to the frame. |

center this text

[2] Overview and Codes

This report **describes** the structural design of a solar canopy *covering* a residential patio located in the City of Larkspur, California. It includes the design of a concrete slab and *stem* wall, steel tube frame, and clip attachments of solar panels to the frame. | |

some text between | |

some more text | |

```
      a■·dl■
wt■ = ■■■■■■ + 4
        2
```

Table 01: New Table ======= ====== ======= col1 col2 col3 ======= ====== =======

A1 23 10 B1 11.1 15.0

Category Standard Year == ========== ====== Loading ASCE-7 2016 Concrete ACI-318 2014 Wood-National Design Specifications AWC-NDS 2018 Wood-Special Design Provisions for Wind and Seismic AWC-SDPWS 2015 Wood Frame Construction Manual AWC-WFCM 2018 == ========== ====== | Design loads for the project are from the California Building and Residential Codes and are summarized in the following tables. |

Table 03 - Another Table Title [file: ins/i01/load_types01.csv]

Sym	Load Effect	Notes
D	Dead load	See IBC 1606 and Chapter 3 of this publication
E	Combined effect of horizontal and vertical earthquake-induced forces as defined in ASCE/SEI 12.4.2	See IBC 1613, ASCE/SEI 12.4.2 and Chapter 6 of this publication
Em	Maximum seismic load effect of horizontal and vertical forces as set forth in ASCE/SEI 12.4.3	See IBC 1613, ASCE/SEI 12.4.3 and Chapter 6 of this publication
H	Load due to lateral earth pressures, ground water pressure or pressure of bulk materials	See IBC 1610 for soil lateral loads
L	Live load, except roof live load, including any permitted live load reduction	See IBC 1607 and Chapter 3 of this publication
Li	Roof live load including any permitted live load reduction	See IBC 1607 and Chapter 3 of this publication
R	Rain load	See IBC 1611 and Chapter 3 of this publication
W	Load due to wind pressure	See IBC 1609 and Chapter 5 of this publication

Table 04 - xxx [file: ins/i01/asce7_load_comb.csv]

CBC 2019 reference	Equation
Equation 16-1	1.4(D +F)
Equation 16-2	1.2(D + F) + l.6(L + H) + 0.5(L or S or R)
Equation 16-3	1.2(D + F) + l.6(Lr or S or R) + l.6H + (f1L or 0.5W)
Equation 16-4	1.2(D + F) + 1.0W + f1L +1.6H + 0.5(Lr or S or R)
Equation 16-5	1.2(D + F) + 1.0E + f1L + l.6H + f2S
Equation 16-6	0.9D+ l.0W+ l.6H
Equation 16-7	0.9(D + F) + 1.0E+ l.6H

[3] Gravity Loads and Seismic Mass

A line of text - and some more xxxxxxxx. |

Value Table 01: First floor dimensions

variable	value	[value]	description
area1	10700.00 sf	994.06 SM	roof area
area2	100000.00 sf	9290.30 SM	floor area
area3	25.00 sf	2.32 SM	floor area

ht1	9.00 ft	2.74 m	wall height
len1	110.00 ft	33.53 m	interior wall length
len2	155.00 ft	47.24 m	exterior wall length
udl1	12.20 psf	584.14 Pa	description

A line of extended text - not formatted | ========== ========= ========== ========== variable value [value] description ========== ========= ========== ========== floordl1 50.00 psf 2394.01 Pa interior wall length floordl2 10.00 psf 478.80 Pa exterior wall length ========== ========= ========== ==========[from file: valsv01test1.csv]

E01 - Equation for floor area

```
                                                                    ACI-315-05
wt■ = area■·floordl■
```

wt3 area3 floordl2

variable value [value] description ========== ========= ========= ========== len1 410.00 ft 124.97 m interior wall length len2 455.00 ft 138.68 m exterior wall length ========== ========= ========= ==========[from file: valsv01test2.csv]