



S A D S

What's New

Version 22.0

Solutions Research Centre Limited

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1 Compatible with ETABS v18 to v20

The format of MDB output files in ETABS v18 to v20 are changed and is not compatible with previous versions. **SADS** v22 has made a conversion to solve the problem.

2 New Wind Code CoP2019

The Code of Practice on Wind Effects in Hong Kong 2019 was released and enforced by November 2020.

SADS v22 add new Wind Load CoP2019 Sub-command to generate wind load according with this new code CoP 2019.

Wind Load CoP2019

Wind Pressure | Along Wind | Across Wind | Upward Forces | Wind Combine

Wind Pressure Data

	X+	X-	Y+	Y-		X+	X-	Y+	Y-
Height of reduction Hd	2.500	2.500	2.850	2.000	Wind direction factor S_g	0.850	0.850	0.850	0.850
Ground level	1.250	1.150	1.650	1.750	Topographic factor S_t	1.000	1.000	1.000	1.000

Main roof floor, excluding the irregular roof features: RF/F

Wind Pressures

Floor	Level	$Z_{e,x+}$	$Q_{e,x+}$	$Z_{e,x-}$	$Q_{e,x-}$	$Z_{e,y+}$	$Q_{e,y+}$	$Z_{e,y-}$	$Q_{e,y-}$
UR/F	55.900	52.150	2.191	52.250	2.191	51.400	2.185	52.150	2.191
RF/F	52.700	48.950	2.168	49.050	2.169	48.200	2.163	48.950	2.168
13/F	49.500	45.750	2.145	45.850	2.146	45.000	2.139	45.750	2.145
12/F	46.300	42.550	2.120	42.650	2.121	41.800	2.114	42.550	2.120
11/F	43.100	39.350	2.094	39.450	2.095	38.600	2.088	39.350	2.094
10/F	39.900	36.150	2.066	36.250	2.067	35.400	2.059	36.150	2.066
09/F	36.700	32.950	2.035	33.050	2.036	32.200	2.028	32.950	2.035
08/F	33.500	29.750	2.002	29.850	2.003	29.000	1.994	29.750	2.002
07/F	30.300	26.550	1.966	26.650	1.967	25.800	1.957	26.550	1.966
06/F	27.100	23.350	1.926	23.450	1.928	22.600	1.916	23.350	1.926
05/F	23.900	20.150	1.881	20.250	1.883	19.400	1.870	20.150	1.881
04/F	20.700	16.950	1.830	17.050	1.832	16.200	1.817	16.950	1.830

Calculate Save Ignore Close

TESTDATA CP2013

For compatible with existing old project, **SADS** retains the Wind Load CoP2004 Sub-command to allow users maintain the wind loads that generated by Code of Practice on Wind Effects in Hong Kong 2004.

3 Compare SADS versions

	SADS v12	SADS v15	SADS v16	SADS v17	SADS v18	SADS v19	SADS v20	SADS v21	SADS v22
CoP 2004	OK	OK	OK	OK	OK	OK	OK	OK	OK
CoP 2011	NO	OK	OK	OK	OK	OK	OK	OK	OK
CoP 2013 w/o FLS	NO	NO	OK	OK	OK	OK	OK	OK	OK
CoP 2013 Full	NO	NO	NO	OK	OK	OK	OK	OK	OK
CoP 2013 Amendments	NO	NO	NO	NO	NO	OK	OK	OK	OK
Online Link to ETABS	NO	NO	NO	NO	OK	OK	OK	OK	OK
Advanced Joint Analysis	NO	NO	NO	NO	NO	NO	OK	OK	OK
Deflection by Curvature	NO	NO	NO	NO	OK	OK	OK	OK	OK
Alternative Database	NO	NO	NO	NO	NO	OK	OK	OK	OK
Prior Acceptance of Joint Design	NO	NO	NO	NO	NO	NO	OK	OK	OK
Prior Acceptance of gravity Load	NO	NO	NO	NO	NO	NO	OK	OK	OK
Wind Code CoP 2019	NO	NO	NO	NO	NO	NO	NO	OK	OK
Compatible with ETABS v18 to v20	NO	NO	NO	NO	NO	NO	NO	OK	OK