Classification of Fire Performance of Wall and Ceiling Lining Materials

Using the Method of Kokkala, Thomas and Karlsson

Reference: Kokkala, M.A. Thomas, P.H. and Karlsson, B. Rate of Heat Release and Ignitability Indices for Surface Linings. Fire and Materials Vol 17, 209-216 (1993)

Instructions: **User input areas are those shaded in light-blue. Before entering or pasting new data into the two columns, it is best to clear any existing data by clicking on the 'Clear Data' button. If necessary, formatting of the cells can be restored by clicking on the 'Formatting' button. Copy data from column U (time) of the csv file and paste into the time column. Copy data from column I (HRR) of the csv file and paste into the Rate of Heat Release column.**

Material Identification/Description: **Lignapal prefinished Timber Veneer Laminate**

Clear Data **Formatting**

INPUT DATA BELOW
Data from AS/NZS 3837:1998
Test Heat Flux = 50 kW/m²

Time (sec)	Rate of Heat Release (kW/m²)
0	0.332718
4	0
8	0.482426
12	0
16	0
20	0
24	0
28	0
32	0
36	0.506517
40	1.67741
44	2.09415
48	4.21607
52	28.0543
56	57.7495
60	78.9886
64	96.3945
68	109.802
72	119.333
76	125.993
80	129.503
84	133.143
88	139.464
92	146.112
96	155.946
100	165.855
104	171.792
108	180.281
112	183.046

Time to Ignition (sec) =	55.0
Ignitability Index (1/min) =	1.092
End of Test (sec) =	2416
Rate of Heat Release Index (m=0.34) =	25994.5
10 minute limit =	6210
Rate of Heat Release Index (m=0.93) =	1894.2
2 minute limit =	2295
12 minute limit =	1470

THE BCA CLASSIFICATION GROUP IS:

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Group 3
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This method assumes that no materials lead to flashover after 12 and before 20 minutes.
Materials that are predicted not to flashover within 12 minutes are put into Group 1.