

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:

Wilsonart Designer White laminate

Clear Data

Formatting

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

Time	Rate of Heat Release
0	0.203464
3	0
6	0
9	0.526922
12	0.419971
15	0.344383
18	0.956841
21	1.22679
24	1.77643
27	3.11355
30	4.08426
33	4.56864
36	5.33018
39	4.91525
42	4.94587
45	6.2511
48	7.09565
51	18.7463
54	50.2377
57	87.7457
60	114.716
63	125.938
66	128.09
69	125.711
72	119.736
75	114.38
78	107.206
81	100.714
84	93.6923
87	85.2474
90	76.4827
93	67.4173
96	58.9049
99	50.7262
102	43.8335
105	37.2933

Time to Ignition (sec) =	54.0
Ignitability Index (1/min) =	1.112
End of Test (sec) =	225
Rate of Heat Release Index (m=0.34) =	2281.5
10 minute limit =	6200
Rate of Heat Release Index (m=0.93) =	1189.4
2 minute limit =	2292
12 minute limit =	1467

THE BCA CLASSIFICATION GROUP IS:

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Group 1

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.