Claims

1. Fire resistant lightweight sheeting when used as vertical wall cladding panel applied to a substrate comprising thin sheet material having an outer layer which is predominantly steel and a thicker inner layer which is predominantly aluminium, the inner layer being a supporting layer, wherein the assembled cladding is fire resistant according British Standard BS8414-2 2015 (amdt 1) as modified by Australian 5113-2016 (amdt1).

2. The fire-resistant cladding panel according to claim 1, the panel having attachment means provided for the purpose of anchoring the panel to the substrate.

3. The fire-resistant cladding panel according to claim 1 or claim 2 wherein the steel layer is about .4mm thick and the aluminium layer is about 2mm thick.

4. The fire-resistant cladding panel according to claim 1 or claim 2 wherein cladding sheet density ranges from 6kg/m^2 to 9kg/m^2.

5. The fire-resistant cladding panel assembly according to claim 1 wherein each panel has a lower edge formed behind the sheet and extending toward the substrate.

6. The fire-resistant cladding panel according to any one of claims 1 to 3 wherein the panel has a folded edge formation with a terminal edge of the sheet concealed inside the folded edge formation.

7. The fire-resistant cladding panel according to claim 6 wherein the panel has an open box form with the folded edge formation being an upstanding surrounding flange, the terminal edge being located inside the flange.

8. The fire-resistant cladding panel according to any one of claims 1-5 wherein the panel has an open box form with the folded edge formation being an upstanding surrounding flange, the flange having spaced openings used to anchor the panel to a substrate.

9. The fire-resistant cladding panel assembly according to any one of claims 7-9 wherein

the folded edge formation is a double fold.

10. In the fire-resistant cladding panel as claimed in use in claim 5, the composite sheet having a sheet density ranging from 6kg/m^2 to 9kg/m^2, the thin steel layer, the thicker aluminium layer, being pre formed then folded to provide a folded edge formation with a terminal edge of the sheet concealed inside the folded edge formation to protect the terminal edge.

11. The fire-resistant cladding panel according to claim 10 wherein the steel layer is about .4mm thick, the aluminium layer is about 2mm thick.

12. The fire-resistant cladding panel according to claim 10 or 11 wherein the panel has an open box form with the folded edge formation being an upstanding surrounding flange, the terminal edge being located inside the flange.

13. The fire-resistant cladding panel according to claim 10 or 11 wherein the panel has an open box form with the folded edge formation being an upstanding surrounding flange, the flange having spaced panel attachment means used to anchor the panel to a substrate.

14. A method for forming a panel as set out in any one of claims 7 and 12-13, the method comprising:

a. providing a rectangular sheet of predetermined external dimensions having respective marginal edge sections terminating in respective terminal edges of the sheet;
b. cutting corners from the sheet;
c. pressing fold lines in the marginal edge sections;
d. folding the marginal edge sections about the fold lines to form a double fold folded edge formation, with the terminal edges concealed inside the flange.

15. The method according to claim 14 including a further step of cutting spaced slots between the fold lines before performing step d.

16. The method according to claim 14 including, in no particular order, but before step d. a further step of, cutting spaced slots at a position set to be between the fold lines and cutting the terminal edges with cutouts aligned with the position of said slots.

17. The method according to claim 14 including a further step of providing spaced slots in said flange.

18. The sheet material when used in any one of claims 1-17, said steel layer being Zincanneal or equivalent.