for interior and exterior grade applications, and can be used in conjunction with other core materials to achieve desired final properties.

[0008] One embodiment of the present invention includes a multilayer decorative laminate comprising at least one layer which is a non-woven fiberglass veil, wherein the non-woven fiberglass veil comprises: a plurality of glass fibers (a); a resin component (b); a fire-retardant component (c); and a particulate component (d), wherein the particulate component (d) comprises inorganic particles having a refractive index higher than a refractive index of the fire-retardant component (c) and an average particle size of from about 0.1 to about 0.5 μm; wherein the plurality of glass fibers (a) is present in an amount of 5% to 15% by weight of the combined (a)-(d), the resin component (b) is present in an amount of 5% to 30% by weight of the combined (a)-(d), the fire-retardant component (c) is present in an amount of 25% to 80% by weight of the combined (a)-(d), and the particulate component (d) is present in an amount of 4% to 50% by weight of the combined (a)-(d); wherein the fire-retardant component (c) and the particulate component (d) are present in a combined amount of from about 50% to about 90% by weight, based on the total weight of the non-woven fiberglass veil, and wherein the fire-retardant component (c) and the particulate component (d) are present in a ratio by weight of from about 95:5 to about 50:50.

[0009] In various preferred embodiments of the present invention, the fire-retardant component comprises at least one selected from aluminum trihydrate, zinc oxide, magnesium hydroxide, calcium carbonate, huntite and hydromagnesite, barium sulfate, antimony oxide, magnesium silicate, clays, and borates. In various preferred embodiments of the present invention, the fire-retardant component comprises aluminum trihydrate. In various preferred embodiments of the present invention, the particulate component comprises titanium dioxide. In various preferred embodiments of the present invention, the resin component comprises a thermoset resin. In various embodiments of the present invention, the fiberglass veil comprises a previously formed fiberglass veil subsequently coated or impregnated with a slurry containing a fire-retardant component and particulate component in a resin system, wherein the resin used to form the initial fiberglass veil and the resin used to form the fire-

retardant/particulate slurry comprise the same resin(s). In various embodiments, a fiber glass veil is formed using a resin binder system that contains a fire-retardant and particulate component in amount as described herein.

[0010] Another embodiment of the present invention includes a non-woven fiberglass veil, comprising: a plurality of glass fibers; a thermoset resin component; aluminum trihydrate; and titanium dioxide, the titanium dioxide comprising rutile

CLAIMS

What is claimed is:

1. A multilayer decorative laminate comprising at least one layer which is a non-woven fiberglass veil, wherein the non-woven fiberglass veil comprises: a plurality of glass fibers (a); a resin component (b); a fire-retardant component (c); and a particulate component (d),

wherein the particulate component (d) comprises inorganic particles having a refractive index higher than a refractive index of the fire-retardant component (c) and an average particle size of from about 0.1 to about 0.5 μm;

wherein the plurality of glass fibers (a) is present in an amount of 5% to 15% by weight of the combined (a)-(d), the resin component (b) is present in an amount of 5% to 30% by weight of the combined (a)-(d), the fire-retardant component (c) is present in an amount of 25% to 80% by weight of the combined (a)-(d), and the particulate component (d) is present in an amount of 4% to 50% by weight of the combined (a)-(d);

wherein the fire-retardant component (c) and the particulate component (d) are present in a combined amount of from about 50% to about 90% by weight, based on the total weight of the non-woven fiberglass veil, and wherein the fire-retardant component (c) and the particulate component (d) are present in a ratio by weight of from about 95:5 to about 50:50.

2. The multilayer decorative laminate according to claim 1, wherein fire-retardant component (c) comprises one or more selected from the group consisting of aluminum trihydrate, zinc oxide, magnesium hydroxide, calcium carbonate, huntite and hydromagnesite, barium sulfate, antimony oxide, magnesium silicate, clays, and borates.

3. The multilayer decorative laminate according to claim 1, wherein the particulate component (d) comprises titanium dioxide.

4. The multilayer decorative laminate according to claim 3, wherein the titanium dioxide comprises rutile titanium dioxide.

5. The multilayer decorative laminate according to claim 1, wherein the resin component (b) comprises a thermoset resin.

6. The multilayer decorative laminate according to claim 1, wherein the plurality of glass fibers (a) is random oriented and have an average fiber diameter of from about 8 μm to about 20 μm, and an average fiber length of from about 8 mm to 20 mm.

7. The multilayer decorative laminate according to claim 1, wherein the non-woven fiberglass veil has a basis weight of from about 200 gsm to about 1200 gsm.

8. The multilayer decorative laminate according to claim 1, wherein the fire-retardant component (c) and the particulate component (d) are present in a combined amount of from about 60% to about 80% by weight, based on the total weight of the non-woven fiberglass veil.

9. The multilayer decorative laminate according to claim 1, wherein the fire-retardant component (c) and the particulate component (d) are present in a combined amount of from about 65% to about 75% by weight, based on the total weight of the non-woven fiberglass veil.

10. The multilayer decorative laminate according to claim 1, wherein the fire-retardant component (c) and the particulate component (d) are present in a ratio by weight of from about 80:20 to about 50:50.

11. The multilayer decorative laminate according to claim 1, wherein the fire-retardant component (c) and the particulate component (d) are present in a ratio by weight of from about 75:25 to about 55:45.

12. The multilayer decorative laminate according to claim 1, wherein the fire-retardant component (c) and the particulate component (d) are present in a ratio by weight of from about 70:30 to about 60:40.

13. A The multilayer decorative laminate according to claim 1, wherein the resin component (b) comprises thermoset resin component; wherein the fire-retardant component (c) comprises aluminum trihydrate; and wherein the particulate component (d) comprises titanium dioxide; wherein the titanium dioxide comprises rutile titania having an average particle size of from about 0.1 to about 0.5 μm with an aspect ratio of less than 10:1; wherein the aluminum trihydrate and titanium dioxide are present in a combined amount of from about 60% to about 80% by weight, based on the total weight of the non-woven fiberglass veil, and wherein the fire-retardant component (c) and the particulate component (d) are present in a ratio by weight of from about 75:25 to about 55:45.

14. The multilayer decorative laminate according to claim 13, wherein the non-woven fiberglass veil has a basis weight of from about 700 gsm to 800 gsm.

15. The multilayer decorative laminate according to claim 1, wherein the at least one layer which is a non-woven fiberglass veil is a decorative element.

16. The multilayer decorative laminate according to claim 15, wherein an outer viewable surface of the laminate has a 60° gloss value of from about 80 to about 120, a distinctness of image of from about 35 to about 99, a haze value of less than about 20, and a peak specular reflectance of from about 30 to about 110.

17. The multilayer decorative laminate according to claim 15, wherein an outer viewable surface of the laminate has a 60° gloss value of from about 100 to about 120, a distinctness of image of from about 60 to about 99, a haze value of less than about 15, and a difference between peak specular reflectance and the 60° gloss value of less than 40.

18. The multilayer decorative laminate according to claim 17, wherein the at least one layer which is a non-woven fiberglass veil is an outer surface layer.