Claims

1. A panel (1) for self-supporting ducts, in particular air-conditioning ducts, made up of a mineral wool core (2), covered on its external face with an exterior covering (3) joined to the external surface of the core, said exterior covering (3) comprising a sheet of aluminum (4) and said sheet of aluminum being the outermost sheet of the exterior covering, said panel being characterized in that said sheet of aluminum (4) has, at least on its outwardly exposed face, a diffuse reflection greater than its specular reflection.

2. The panel according to claim 1, wherein the diffuse reflection of said outwardly exposed face of the sheet of aluminum is at least twice as great as its specular reflection.

3. The panel according to one of the preceding claims, wherein the diffuse reflection of said outwardly exposed face of the sheet of aluminum is greater than 50%, and preferably is greater than 60%, or even greater than 70%, and preferably less than 90%.

4. The panel according to one of the preceding claims, wherein the specular reflection of said outwardly exposed face of the sheet of aluminum is less than 30%, and preferably is less than 25%, or even less than 20%.

5. The panel according to one of the preceding claims, wherein the roughness parameter Sz of the outwardly exposed face of the sheet of aluminum, as measured according to the NF ISO 25178 standard, is greater than 20 micrometers and preferably is greater than 30 micrometers, or even greater than 40 micrometers.

6. The panel according to one of the preceding claims, wherein the roughness parameter SSk of the outwardly exposed face of the sheet of aluminum, as measured according to the NF ISO 25178 standard, is greater

than 0.1 and preferably is greater than 0.2, or even greater than 0.3 or better still greater than 0.4.

7. The panel according to one of the preceding claims, wherein the other face of the sheet of aluminum has a specular reflection greater than its diffuse reflection.

8. The panel according to one of the claims 1 to 6, wherein the other face of the sheet of aluminum has a specular reflection less than its diffuse reflection.

9. The panel according to one of the preceding claims, wherein the mineral wool core (2) is covered on its interior face (5) with an inner covering connected to the interior surface of the core and comprising an exterior sheet of aluminum, the sheet of aluminum having, on its face furthest from said core, a diffuse reflection greater than its specular reflection.

10. The panel according to any of the preceding claims, wherein the exterior covering consists of said sheet of aluminum, preferably reinforced by a mesh of reinforcing glass fibers (9).

11. The panel according to one of the claims 1 to 9, wherein said exterior covering comprises a sheet of kraft paper arranged below said sheet of aluminum and preferably adhesively bonded to the core of mineral fibers, said sheet of aluminum preferably being reinforced by a mesh of reinforcing glass fibers (9).

12. The panel according to any of the preceding claims, wherein the outer surface of the central core (2) further comprises a mat (7) of fiberglass or synthetic fibers, said mat (7) preferably being bonded to the central core (2) by a binder used for the crosslinking of the mineral fibers constituting said core, so that the panel comprises, from the external surface of the mineral wool core:

- said mat (7) of fibers of fiberglass or of synthetic fibers,
- said exterior covering (3).

13. The panel according to any of the preceding claims, characterized in that the exterior covering is covered with an anti-UV protective film, in particular chosen from the HRUV (highly resistant to ultraviolet) epoxy resins, urethanes, polyvinyl fluorides.

14. The panel according to one of the preceding claims, characterized in that the panels terminate at their ends in edges to be interconnected.

15. The panel according to one of the preceding claims, characterized in that the covering of the panel is extended into a flap so that, in an assembly situation with another module, it partially overlaps the covering of said module.

16. A self-supporting duct manufactured from panels according to one of the preceding claims.

17. Use of panels according to one of claims 1 to 15 for the manufacture of self-supporting ducts, in particular for distributing air conditioning.