

{Name of Document} Abstract

An inner glass skin structure is configured by a sashless plate glass that overcomes the difference in the coefficients of linear expansion and insufficient rigidity of aluminum and glass having a superior design, in which the four sides of each of the sashless plate glass are covered by an aluminum covering material having narrow width.

The inner glass skin structure is configured by a plurality of sashless plate glasses 2 four sides of which are covered with an aluminum covering material 3, a door roller 4 and a securing foot member 14 respectively fixed on the bottom of each plate glass 2 on the movable side and immovable side of the plate glass 2 of the sliding door formation, and a lower rail member 5 arranged underneath the plate glass 2 and an upper rail member 6 arranged directly above each plate glass 2. On the top and bottom of the plate glass 2, the inner face of an end face cover part 3a of the covering material 3 is bonded to an elastic intervening piece 8 that is fixed to the end face of the plate glass 2; on both the lateral sides of the plate glass 2, a plurality of coupling strip plates 9 are inserted in a coupling plate retaining section 3d on the inner face of the end face cover part 3a of the covering material 3 in series with a predetermined spacing therebetween; and each coupling strip plate 9 is bonded to an elastic intervening piece 10 that is secured to the end face of the plate glass 2.