

Abstract

Disclosed are a 6000-series aluminum alloy sheet having high formability, high flangability and few roping line defects, and a manufacturing method therefor. The sheet has an average grain size of 20-32 μm , a recrystallization texture density of 6.5-10.0, a cubic texture component content of less than or equal to 8%, and a Gaussian texture component content of less than or equal to 7%. The method comprises: (1) homogenizing a cast ingot, the temperature of homogenization being 530-580°C; (2) directly performing hot rough rolling, hot finish rolling, and hot final rolling and coiling on the homogenized cast ingot, controlling the initial rolling temperature of the hot finish rolling to be 400-480°C, and controlling the temperature of the hot final rolling and coiling to be above 250°C; (3) cold rolling: controlling the total deformation of the cold rolling to be 50-85%; (4) solution treatment; and (5) performing pre-aging treatment, and then performing air cooling, so as to obtain the 6000-series aluminum alloy sheet.

(No Suitable Fig.)