

Oriented Strand Board (OSB) Quality Control

The quality of OSB and waferboard is the responsibility of the individual manufacturer. Each mill must establish its own program of in-plant quality control to ensure the finished product meets or exceeds the requirements for the grade specified in the applicable standard. Panel quality is affected by every process in the plant and by the quality and consistency of the raw materials used to manufacture the panels. Process control is uniquely designed for each mill and reflects the particular combination of machinery, control devices, materials and product mix. Continuous monitoring of all process variables by the plant quality control staff maintains the product as required by the applicable standards. Among the factors most carefully monitored and controlled are the sorting of logs by species, size, and moisture content, strand or wafer size and thickness, moisture content following drying, the consistent blending of strands or wafers, resin and wax, the uniformity of the mat leaving the forming machine, the press temperature, pressures, closing speed, thickness control and pressure release control, quality of panel faces and edges, panel dimensions and the appearance of the finished panel.

Physical testing of the panels according to standard test procedures is necessary to verify that production conforms to the applicable standard. In addition, mills monitor panel quality on a continuing basis by carrying out such tests on hot panels right off the production line to ensure process control is maintained. These hot tests are correlated to the standard conformance tests. All OSB manufactured in Canada must be certified by independent quality assurance organizations who monitor manufacturing performance and mill quality control programs. All construction grade panels show the stamp of the quality assurance agency on the panel face or edge.