ASTM C364 Standard Test Method for Edgewise Compressive Strength of Sandwich Constructions

HST GROUP
Focus In Material Test

Applications:

ASTM C364 is used to determine the compressive properties (strength & modulus) of structural sandwich construction in a direction parallel to the sandwich facing plane

Test Method

ASTM C364 consists of subjecting a sandwich panel to monotonically increasing compressive force parallel to theplane of its faces.
The force is transmitted to the panel through either clamped or bonded end supports.
Stress and strength are reported in terms of the nominal cross-sectional area of the two facesheets, rather than total sandwich panel thickness, although alternate stress calculations may be optionally specified.
The only acceptable failure modes for edgewise compressive strength of sandwich constructions are those occurring away from the supported ends.
The sandwich column, no matter how short, usually is subjected to a buckling type of failure unless the facings are so thick that they themselves are in the short column class.
The failure of the facings manifests itself by wrinkling of the facing, in which the core deforms to the wavy shape of the facings; by dimpling of the facings into the honeycomb cells; by bending of the sandwich, resulting in crimping near the ends as a result of shear failure of the core; or by failure in the facing-to-core bond and associated facesheet buckling.

Parameter:

Model	HST-ZYB303A
Standards	ASTM C364
Capacity	3kN
Specimen type	Sandwich
Specimen size	(≥40)×(≤75)×(≤40)mm
Temperature	0℃~40℃