

# PHYSICAL TESTING – PAPER BOARD

## GENERAL

Ash	ISO 1762, 2144
Moisture	ISO 287
Conditioning of samples	ISO 187
Grammage	ISO 536
Thickness, bulk and density	ISO 534
Air permeance, Bendtsen	ISO 5636-3
Air permeance, Sheffield	T 547
Air resistance, Gurley	ISO 5636-5

## STRENGTH PROPERTIES

Bursting strength	ISO 2759
Dennison waxtest	T 459
Fracture toughness	SCAN P 77
Tensile properties	ISO 1924-2/-3
Tear resistance	ISO 1974
Scott Bond	T 569
Folding endurance	ISO 5626
Z- Strength	ISO 15754
Z- Strength	SCAN P 80
Z-direction Young's modulus	SCAN P 80

## STIFFNESS AND COMPRESSION PROPERTIES

Resistance to bending	ISO 2493
Compressive strength, SCT	ISO 9895
Ring crush test, RCT	ISO 12192
Flat crush resistance, FCT	ISO 3035

## STRUCTURE

Structure thickness and density	SCAN P 88
---------------------------------	-----------

## OPTICAL PROPERTIES

Brightness	ISO 2470-1,-2
Colour	ISO 5631-1,-2
Fluorescence	ISO 11475
Light scattering coefficient, s	ISO 9416
Light absorption coefficient, k	ISO 9416
L*, a*, b* (CIELAB)	ISO 5631-1,-2
Metamerism-Index	ISO 5631-1,-2
Opacity	ISO 2471
Paper gloss	ISO 8254-1,-3
Tint	ISO 11475/11476
Whiteness ASTM E313	ISO 11475/11476
Whiteness Berger	ISO 11475/11476
Whiteness CIE	ISO 11475/11476
Whiteness Index Hunter	ISO 5631-1,-2
Whiteness Stensby	ISO 5631-1,-2
Yellowness Index	ISO 2471
Y-value	ISO 2471

## FORMATION

Betaradiogram <100 gsm	FA 11.700
------------------------	-----------

## MOISTURE EFFECTS

Hygroexpansivity	ISO 8226-1,-2
In-plane shrinkage	SCAN CM 70
Moisture effects, climate chamber	FA 12.007

## SORPTION PROPERTIES

Capillary rise, Klemm method	ISO 8787
Water absorbency, Cobb method	ISO 535
Water vapour transmission rate	ISO 2528/9932

## WET STRENGTH PROPERTIES

Initial wet-web tensile strength	SCAN CM 31
Initial wet tensile properties	SCAN CM 69
Tensile strength after immersion in water	ISO 3781
Wet tensile strength and wet tensile strength retention	SCAN P 20

## SURFACE PROPERTIES

Burn out	FA 11.804
Calendering	FA 11.803
Coating/pigment surface cover	FA 11.800
Friction	ISO 15359
Gloss variation GIA	FA 11.801
Mercury porosimetry	FA 11.810
Surface roughness, Bendtsen/PPS	ISO 8791-2,-4

## PERMANENCE

Acc. ageing	ISO 5630-1, -3, -4, -7
Brightness ageing, xenon light	FA 11.900
Permanence, paper for documents	ISO 9706
Permanence, archival papers	ISO 11108
Classification to life span	DIN 6738
Stability, graphic applications	ISO 20494

## MICROBIOLOGY

Total colony number	SCAN C 60/ P 81
Surface colony number	SCAN C 61/ P 82