

ZEO[®] Dual Arch Corrugated Cardboards

Green Technology Dept of CJCHT Group (TMIT) further presents here a novel four-layer, dual corrugated (dual arch) and $ZEO^{(0)}$ enhanced cardboard structure. By means of dual arch structure and $ZEO^{(0)}$ glue enhanced technology, this dual-arch $ZEO^{(0)}$ enhanced structure is specifically designed for strong intensity to replace traditional all virgin paper cardboards with recycled ones for trees saved, and high absorption of damp, excellent water resistant feature and chemicals removal. It's suitable for frozen box, and specifically for storage of fruit or fish. The new four-layer $ZEO^{(0)}$ cardboard can also demonstrate an excellent anti-humid and anti-corrosive capability for specific applications without using traditional toxic chemicals (like PVA) in the glue.

The main characteristics of this four-layer $ZEO^{\$}$ cardboard include: (1) thinner and saving storage space (21% reduced*) as compared with existing five-layer corrugated board, (2) saving one layer of paper with intensity enhanced as compared with existing five-layer corrugated board, (3) higher intensity with same paper spec, (4) excellent anti-humid capability, and (5) convenient for the making of boxes and cartons.

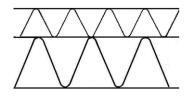


Fig 1. Double wall corrugated cardboard

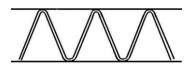


Fig 2. Dual-corrugated cardboard

Table 1. Fertormance test data			
Types of Cardboards	B/B (four layers)	A/A (four layers)	A/B (five layers)
Thickness (mm)	3.72	5.98	7.6
Ratio	0.49	0.79	1.00
Weight (g/m^2)	967.3	1025.5	1250.5
Ratio	0.77	0.82	1.00
Flat crush strength (KPa)	<u>231.4</u>	<u>153.6</u>	<u>87.9</u>
<u>Ratio</u>	2.63	<u>1.75</u>	<u>1.00</u>
Edge crush strength (N/m)	3646	4538	5548
Ratio	0.66	0.82	1.00
Burst strength (KPa)	939	955	1182
Ratio	0.79	0.81	1.00

Table 1. Performance test data*

Note: Ratio is calculated by the general dual-corrugated cardboard over A/B type cardboard. Intensity of corrugated cardboard with ZEO[®] can be further enhanced above 10% (according to paper quality).

*Data source: Packaging engineering Vol. 27, No. 3 (2006)

Affiliate of Green Technology BU. CJCHT Group (Taiwan Magnetic Innovation Technology, Inc.)
US Representative:US Representative:Joe DelacruzTel: 479 381 9672Shanghai, PRC Representative:Susan WuTel: 021-5179-3785Taiwan Representative:Grace LiuTel: 03-658-9912http://www.nanozeo.comE-mail: raymond@nanozeo.com