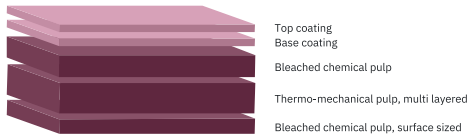


# INCADA EXEL

Facts, figures and properties -  
Product specification for Incada Exel.

# INCADA EXEL

## Folding Box Board



Incada is a folding boxboard product based entirely on fresh fibres. It has a multi-layered fibre composition and construction designed to maximise its stiffness whilst having a low density.

The outer layers consist of bleached chemical sulphate pulp and the middle layers of thermo-mechanically separated fibres (TMP). Pigment coating can be applied to one or both sides and its unique composition is designed so that the product family satisfies different end-use printability requirements.

## Product description

Incada Exel is a folding box board (FBB) designed for quality packaging applications where outstanding visual impact is vital. Its lightweight construction has been specifically developed to maximise its high stiffness characteristics making it ideal for a wide range of high-end packaging solutions. This fresh fibre paperboard consistently meets the requirements for high performance in quality printing, varnishing and high-speed conversion processes.

The carefully developed coating ingredients are applied in two layers onto the print side which guarantees a very smooth surface suitable for demanding half tone gravure and offset litho processes, as well as digital printing applications where smoothness and uniform ink absorption are of prime importance.

The reverse side of Incada Exel is uncoated but has both enhanced whiteness and smoothness which can be printed to create a more natural look and feel.

# Incada Certifications & Standards

Product related		
FSC® Mix	Food safety	Toy safety
FSC-C008588 SA-COC-012971	EC 1935/2004 EC 2023/2006 FDA 21 CFR German BfR XXXVI Normpack	EN 71 Part 3 EN 71 Part 9

All fibres from sustainable and controlled sources in compliance with the UK Timber Regulation 01/01/2021.

EcoVadis Platinum Medal awarded in 2023 (top 1% of all companies assessed).

Mill related
ISO 9001
ISO 14001
ISO 45001
ISO 50001
FSC®
FSSC 22000

For more detailed information about our certificates, visit [iggesund.com/certificates](https://iggesund.com/certificates).

## Properties - Print side

		Tolerances	Methods/Remarks
Grammage (g/m <sup>2</sup> )	210-350	+/-4%	ISO 536
Colour L* - PS	95.2	+/-0.8	ISO 5631-2
Colour a* - PS	1.4	+/-0.6	ISO 5631-2
Colour b* - PS	-7.2	+/-1.0	ISO 5631-2
Whiteness - PS (%)	120	+/-2.5	ISO 11475
ISO Brightness R457 - PS (%)	91.5	+/-2.0	ISO 2470
Surface roughness PPS - PS (µm)	0.9	≤1.3	ISO 8791-4
Board gloss 75° - PS (%)	50	-10	ISO 8254-1
Surface strength IGT blister - PS (m/s)	1.0	≥0.85	ISO 3783
Cobb - PS (g/m <sup>2</sup> )	30	-	ISO 535

## Properties - Reverse side

		Tolerances	Methods/Remarks
Grammage (g/m <sup>2</sup> )	210-350	+/-4%	ISO 536
Colour L* - RS	95.0	+/-0.8	ISO 5631-2
Colour a* - RS	0.5	+/-0.6	ISO 5631-2
Colour b* - RS	-2.0	+/-1.0	ISO 5631-2
Whiteness - RS (%)	97	-	ISO 11475
ISO Brightness R457 - RS (%)	86	-	ISO 2470
Cobb - RS (g/m <sup>2</sup> )	30	-	ISO 535

## Common properties

		Tolerances		Tolerances		Tolerances	Methods/Remarks
Grammage (g/m <sup>2</sup> )	210-350	+/-4%	210-235	+/-4%	255-350	+/-4%	ISO 536
Moisture content (%)	-	-	8.0	+/-1.0	8.5	+/-1.0	ISO 287
Ply bond (J/m <sup>2</sup> )	140	≥95	-	-	-	-	Tappi 569
Robinson taint	<0.6	-	-	-	-	-	EN 1230, DIN 10955

Robinson taint value is below the detection limit of 0.6.

## Grammage dependent properties

									Tolerances	Methods/Remarks
Grammage (g/m <sup>2</sup> )	210	225	235	255	280	300	325	350	+/-4%	ISO 536
Thickness (µm)	340	375	400	450	490	540	590	640	+/-4%	ISO 534
Caliper (pt)	13.4	14.8	15.7	17.7	19.3	21.3	23.2	25.2	-	-
Bending stiffness L&W 5° - MD (mNm)	20.1	26.3	29.4	38.4	49.2	60.4	77.4	91.4	-	ISO 5628
Bending stiffness L&W 5° - CD (mNm)	7.9	10.6	11.9	15.8	20.5	25.4	32.8	38.9	-	ISO 5628
Bending resistance L&W 15° - MD (mN)	220	282	314	405	515	628	800	941	-15%	ISO 2493-1
Bending resistance L&W 15° - CD (mN)	96	123	136	176	224	273	348	409	-15%	ISO 2493-1
Bending moment Taber 15° - MD (mNm)	10.6	13.6	15.2	19.6	24.9	30.3	38.7	45.5	-	-
Bending moment Taber 15° - CD (mNm)	4.6	5.9	6.6	8.5	10.8	13.2	16.8	19.8	-	-
Cobb HS PS (g/m <sup>2</sup> 180 s)	40	40	40	40	40	40	40	40	-	ISO 535
Cobb HS RS (g/m <sup>2</sup> 180 s)	40	40	40	40	40	40	40	40	-	ISO 535

Last updated 12 Jan 2024

Bending Moment Taber is a calculated value based on a correlation factor of 20.7.

## Test method

All properties are measured in test climate 23°C/50% RH at Workington mill. Tolerances and max/min levels, when stated, are based upon 95% confidence interval within each production run. Read more about testing methods in our section about [General Technical Information](https://www.iggesund.com/insights/paperboard-know-how/general-technical-information/) (<https://www.iggesund.com/insights/paperboard-know-how/general-technical-information/>).

## Online version

Access the online version of this spec sheet on:  
[iggesund.com/incada-exel](https://www.iggesund.com/incada-exel)



