

**JAMES  
CROPPER**

EST. 1845



**TECHNICAL DATA**

## VANGUARD

**TARGET MARKET**

Graphic print

**Leading range of smooth uncoated coloured papers for graphic print use.**

Vanguard has a high opacity making it ideal as a medium for print. Produced using twin-wire process for an even-sided finish.

Suited to both traditional and digital print processes.

[www.jamescropper.com/collection/vanguard](http://www.jamescropper.com/collection/vanguard)



### APPLICATIONS

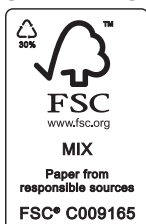
- Business Stationery
- Brochures
- Calendars
- Corporate Literature
- Greetings Cards
- Invitations
- Menus & Certificates
- Promotional Print

### PRINT SUITABILITY

- Lithography
- Dry toner
- Silkscreen
- Flexography
- Relief Processes
- Letterpress
- Inkjet
- Die Cutting
- Laser Cutting
- Foil Blocking \* \*\*
- Drilling & Punching



### CERTIFICATIONS



Fully Recyclable



Elemental Chlorine Free



CHP Recycling Energy



REACH Compliant (EC 1907/2006)

**NOTE:** \* Black not suitable for metallic foiling \*\* Testing recommended



# VANGUARD



## COLOURS

- Jade
- Black
- Lilac
- Lime Green
- Celestial Blue
- Marine Blue
- Cerise
- Navy Blue
- Cherry
- Orange
- Cobalt Blue
- Pink
- Cream Vellum
- Daffodil
- Raspberry
- Red
- Dark Grey
- Silver Grey
- Deep Blue
- Sunlight Yellow
- Emerald Green
- Gold
- Violet
- Ivory
- White



## TECHNICAL DATA

|                            |         |     |     |     |     |      |           |
|----------------------------|---------|-----|-----|-----|-----|------|-----------|
| Colour:                    | Various |     |     |     |     |      | Tolerance |
| Grammage g/m               | 120     |     |     |     |     |      | ± 5%      |
| Thickness µm :             | 200     | 230 | 300 | 380 | 750 | ± 5% |           |
| Bendtsen Roughness ml/min  | 250     | 250 | 250 | 250 | 250 | 800  | TARGET    |
| Cobb (1 min) g/m           | 25      | 25  | 25  | 25  | 25  | 25   | TARGET    |
|                            | 35      | 35  | 35  | 35  | 35  | 35   | MAXIMUM   |
| Dennison Wax Pick / Clear: | 14      | 14  | 14  | 14  | 14  | 14   | MINIMUM   |
| Moisture %:                | 6       | 7.5 | 7.5 | 7.5 | 7.5 |      | NOMINAL   |
| Rel. Humidity:             |         |     |     |     |     | 50   | -10+15    |

**FOR MORE INFORMATION, CALL OUR SALES TEAM: +44 (0)1539 818 240**