

## Hiding Power Charts

These black and white charts are available in a variety of sizes and patterns to meet the requirements of most popular tests such as hiding power, contrast ratio, colour of paints, inks, varnish and similar coating materials.

## Sealed Charts

They are constructed of high quality paper based card, sealed and UV cured with solvent resistant lacquer. They are suitable for use with the majority of coating materials.

## Penetration Charts

The uncoated versions are recommended where coatings of paints, varnishes, stains and sealants etc. are intended for application on porous surfaces, plasterboard, wood and bricks.

## Properties

Some of the properties that can be determined by applying coatings to the charts, either visually and or by instrumentation include; gloss, opacity, contrast ratios, colour, leveling and sagging.

## Determination of coating properties

Visual determination can be carried out under suitable lighting conditions (See SHCAC Light Booths) or where a more precise determination is required, suitable measuring instruments are available, Glossmeters, (on coated charts) Opacity Meters, and colour measuring instruments, Spectromatch and Micromatch..

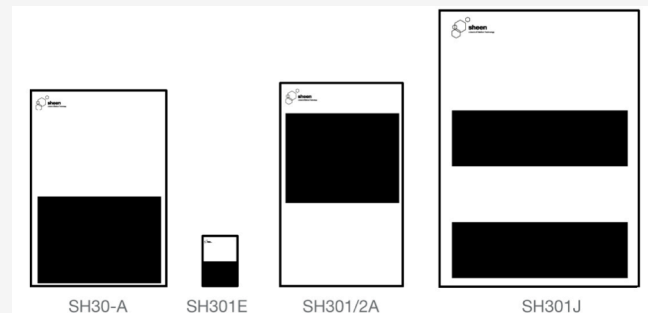
## Method for applying coating materials

The charts should be placed on a firm flat surface, an Impression Bed or Automatic Film Applicator or a suitable glass plate.

Fluid materials can be applied to the charts by the use of Bar Applicators, Wire Bars, brushes, rollers and spray gun/can (own supply).

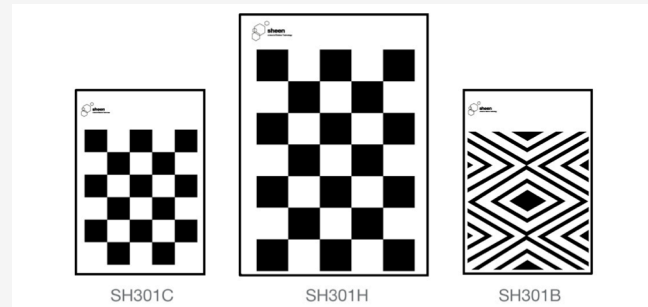
## Opacity Charts

A choice of three charts consisting of plain black and white areas designated for testing hiding power of coating materials, the areas are of sufficient size for reflectance measurement by instruments.



## Opacity and Drawdown Charts

The checkerboard and chevron patterns charts are designed for visual assessment for opacity of coating materials.



## Opacity/Display Charts

Combined chevron pattern with black and white areas offers both visual and measurement by instrumentation for opacity and gloss.



# Physical Testing: Hiding Power Charts

## Identification and traceability

Each individual chart and a cover sheet are identified with the product code and batch number.

The top section of the charts have a printed legend for recording sample data; batch, date and time. A 5 mm diameter hanging hole is positioned at the top of the chart.

## Customised charts

Charts can be supplied in accordance with your specifications in either the same format but printed in less contrasting colours for testing coatings with lower hiding power, also alternative colours in place of black over white and other patterns. (Minimum batch size 5000 pieces).

## International standards

ASTM D 2243 - Checking the effects of freeze thaw resistance of water-borne coatings, hiding power, gloss, speckling, agglomeration, coagulation, or colour change.

ASTM D3022 - Colour and strength of pigments.

## Hiding power Charts associated products

**Bar Applicators** - ensures a controlled, repeatable thickness of coating film.

**Impression Beds** - offers a flat backing surface to enable a smooth drawdown with Bar Applicators.

**Automatic Film Applicators** - flat surface, controlled speed of sample application, used with the Bar Applicators.

**Wet Film Thickness Gauges** - determine the wet film thickness immediately after application.

**Glossmeter** - measure the Gloss values of dry coating films.

**Opacity Meters** - measure the performance of the coating material to cover the black and white sections of the charts.

**Colorimeters** - measure the colour of the dry film.

See our website at [sheeninstruments.com](http://sheeninstruments.com) for details of associated products or call us on +44 (0)208 783 4321.

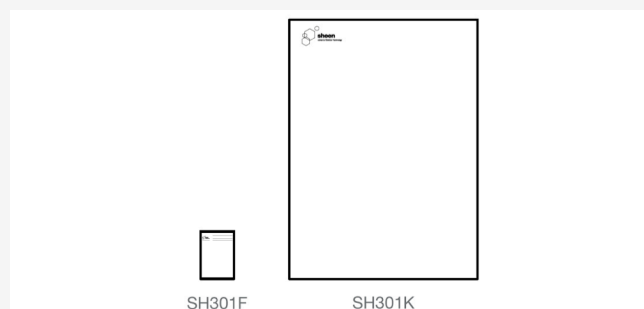
## Transparency Films (SH1136)

The films are manufactured from colourless polyester sheets, they can be used to determine:

- Transparency, Opacity, (when placed over contrasting surfaces, e.g. Hiding Power Charts)
- Surface density of dry coatings (Compare coated foils against uncoated foils of the same size)
- Flocculation of pigment particles.

## Plain White Opacity Charts

These cards are for determination of opacity/covering power of coatings intended for white substrates.



## Penetration Charts (Uncoated)

In addition to those shown, other charts within the Sheen range can be supplied uncoated, subject to minimum order of quantity of 5000.



## Physical Testing: Hiding Power Charts

### International standards for SH1136

BS 3900-D11, ISO 6504-3 - Hiding Power.

ISO 2814 - Contrast Ratio, when used over black and white charts.

### Ordering information

Product Ref	Application	Description	Finish	Dim. mm
SH301E	Smaller version of 301A. (SH310 Sheen-Opac refers)	Opacity	Coated	150 x 100
SH301F	Visual/instrument determination of opacity of darker samples or spreading rates	Opacity	Coated	150 x 100
SH301L	Handy chart for visual determination for opacity of lighter colour samples.	Opacity	Coated	185 x 75
SH301A	Visual/instrument determination of opacity. (SH310 Sheen-Opac refers)	Opacity	Coated	250 x 180
SH301B	Visual determination of opacity & spreading rate. (Apply by Bar Applicator or brush)	Opacity/ Spreading	Coated	250 x 180
SH301C	Visual determination of opacity & spreading rate. (Apply by Bar Applicator or brush)	Opacity/ Spreading	Coated	250 x 180
SH301D	Visual/instrument determination of opacity (SH310 Sheen-Opac refers)	Opacity	Coated	250 x 180
SH301/2A	Visual/instrument determination of opacity.(SH310 refers)	Opacity	Coated	255 x 140
SH301H	Visual determination of opacity & spreading rate. (Apply by Bar Applicator or brush)	Opacity/ Spreading	Coated	420 x 300
SH301J	Visual/instrument determination of opacity and covering power. (SH310 Sheen-Opac )	Opacity/ Spreading	Coated	420 x 300
SH301K	Visual/instrument determination of opacity of darker coatings or spreading rates	Opacity	Coated	420 x 300
SH301G	For checking uniformity of coatings on porous white surfaces.	Penetration	Uncoated	150 x 100
SH301EU	For checking uniformity of coatings on porous surfaces (white) and semi porous (black)	Penetration	Uncoated	150 x 100
SH301AU	For checking uniformity of coatings on porous surfaces (white) and semi porous (black)	Penetration	Uncoated	250 x 180
SH301/2AU	Larger version of 301EU.	Penetration	Uncoated	255 x 140
SH301JU	For checking uniformity of coatings on porous surfaces (white) and semi porous (black)	Penetration	Uncoated	420 x 300
SH1136	Transparency Films	-	-	230 x 115 x 50 µm

All products sold in packs of 1000 unless stated.

Owing to continuous development, we reserve the right to introduce improvements and modify specifications without prior notice.

**Our sales team can be contacted on:  
[info@sheeninstruments.com](mailto:info@sheeninstruments.com) or +44 (0)208 783 4321**