



# Performance Delivered



Made in  
England



The 8 Reasons Why A Dudson  
Plate Is Made To Last

# Intro

The Dudson ceramic body is industrially tough, we blend centuries of experience with cutting edge technology and design innovation to produce one of the strongest ceramic bodies in the world.\*

Dudson is a heritage brand dating back to 1800, and to this day is still made by renowned potters in Stoke on Trent, the world capital of ceramics. Every step in the process is practised and refined. From the sourcing of raw materials and unique formulation of the clay body, to shape engineering and numerous quality checks ensuring that Dudson products work as hard as you do. This brochure outlines the many reasons why Dudson products are made to last.

\* Based on MOR

01 Performance Materials  
Page 04

02 Engineered Shape & Form  
Page 06

03 Vitrification & Firing  
Page 08

04 Glazing  
Page 10

05 Quality & Conformance  
Page 12

06 Design Innovation  
Page 14

07 Service & Stock  
Page 16

08 History & Heritage  
Page 18

8 REASONS WHY A DUDSON PLATE IS MADE TO LAST

SCIENCE, ENGINEERING, EXPERTISE



# 01

## Performance Materials

Our unique clay recipe is essential in creating a strong and durable product for the hospitality industry. Our raw materials are selected to deliver the optimum balance of strength and whiteness.



### UK Clay Source

Our clay comes from Devon and Cornwall in the UK and we work closely with our suppliers to ensure continuity of supply. Geologically there is over 100 years worth of supply at our clay source.



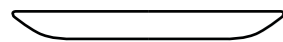
### DID YOU KNOW?

Six tests are performed on our raw materials giving us a thorough understanding of the clay, this ensures predictability, consistency and performance.

### Added Alumina

Alumina or Aluminium Oxide is the chemical compound of aluminium and oxygen with the chemical formula  $Al_2O_3$ . Alumina adds superior strength and whiteness and has shock absorbent qualities that combined with other components improves the products performance in use.

### TECHNICAL FACTS



4

Classifications of Raw Materials

### Alumina

Adds Strength, Shock Absorbency and Whiteness

### China Clay

Adds Whiteness

### Ball Clay

Adds Elasticity and Flexibility

### Fillers & Fluxes

Occupies the Space Between Particles, Aiding Vitrification



### Alumina Strength

The Alumina that goes into our clay body to add strength and shock absorbency comes from Bauxite Rock, the mineral used to make aluminium.

# 02

## Engineered Shape & Form

Every piece of Dudson's ceramic is designed with performance in mind. Through expert shape engineering, we reinforce strength and durability while continual investment in technology guarantees functionality and consistent quality.



### Engineered Balance

A combination of extensive industry knowledge and continual investment in leading manufacturing technology ensures the product is kept at an optimum weight for both functionality and durability.

Weight is reduced where possible.

Weight added to potential impact areas provides greater strength.



### DID YOU KNOW?

100% of unused clay is recovered and recycled



### Innovation & Robots

Innovation in machinery and robotics gives us the capability to create innovative shapes and large pieces.

### Consistency

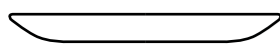
The technology used to form our products ensures consistency in size and weight allowing pieces to be stacked back of house using less space and reducing breakages.



### Finishing

Edges are sponged to create a round, smooth finish which is less vulnerable to chipping.

### TECHNICAL FACTS

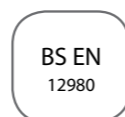


## Less than 10cm

The average height of key tableware coupe shapes when 12 are stacked.



International Standard  
Impact resistance of ceramic tableware



British Standard  
European Approved  
Determination of Impact Resistance

# 03

## Vitrification & Firing

100% of Dudson's ceramics are vitrified which is essential to the hospitality industry. Vitrification is a process where we physically change the clay, melting it to make our ceramics impervious to water, which also means that bacteria has less opportunity to penetrate into the ceramics and grow.

### Controlled Environment

Controlling the oxygen levels in our kilns, ensures a consistent colour and glaze surface.



### High Strength Firing

Combining a firing temperature of upto 1200°C with a unique recipe of performance materials ensures vitrification.

#### TECHNICAL FACTS

10,000

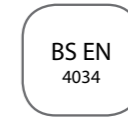
The number of times we test vitrification a year.

#### DID YOU KNOW?

Our investments in fast fire kilns reduces energy consumption by up to 40%

### Vitrification Testing

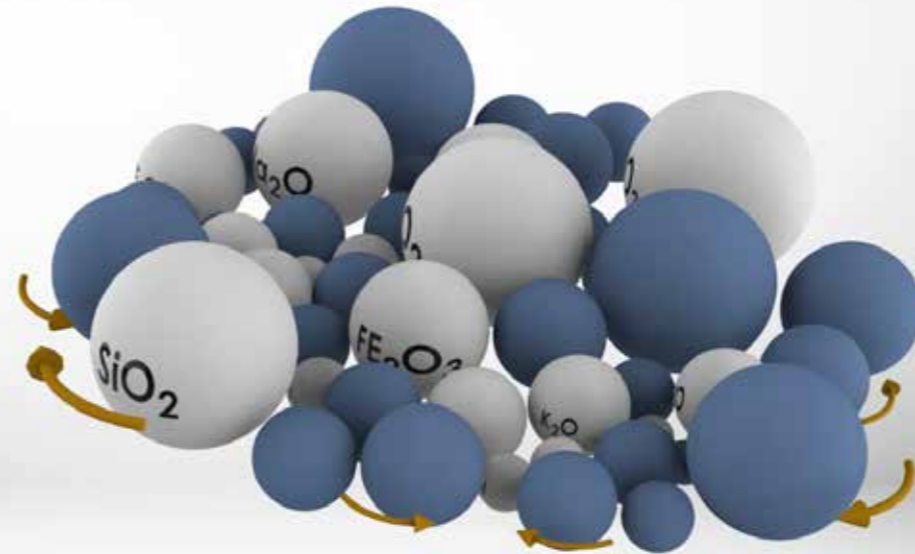
We test the vitrification of our product everyday, both in the kilns during firing and in our laboratory when the manufacturing process is complete.



British Standard  
European Approved  
Vitrified hotelware



British Standard  
European Approved  
Water absorption



### Vitrification

Breakages in ceramics are generally related to porosity, or how much water a piece can absorb. Water absorption weakens the chemical structure affecting its durability over time. Through the process of vitrification, the particle structure of our ceramic body becomes strong, dense and watertight.



### Strength Testing

On average, our UK made vitrified ceramic bodies can withstand the weight of 19500psi. This is the equivalent to the weight of an elephant.

# 04

## Glazing

Our glaze is hard wearing and designed specifically for the hospitality environment. The durability is a combination of the glaze recipe, the firing temperature and substrate.

### DID YOU KNOW?

Our glazing system is carefully formulated to allow oversprayed glaze to be collected, go through a lengthy cleaning process and then be reused, minimising our impact on the environment.



## Fritted Glaze

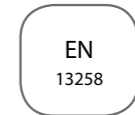
The components in our glaze are carefully selected to maximise clarity and resilience. Our glaze is fritted, creating a smooth finish and added durability.

## Semi-matte Glaze

Evo Origins and The Maker's Collection are finished in a semi-matte durable glaze. Traditional matte glazes are not as durable as gloss, however we have specially formulated our semi-matte to perform in line with our gloss glaze.

## Hand Glazing

Harvest and The Maker's Collection designs are hand dipped, this enhances the artisan look of the products, creating original 'maker's marks' on the reverse of each piece.



European Standard  
Crazing resistance of  
ceramic articles

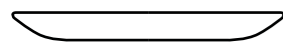
## Thermal Stability

During the critical stages of firing we ensure that the glaze contracts at an optimum level with the clay body. This prevents failure in use called crazing. The relationship between the Glaze and the Body is determined using the coefficients of thermal expansion.

## Underglaze & Inglaze Decoration

Decoration is applied underglaze or inglaze, this provides a protective layer so that colour and pattern does not fade or become damaged.

### TECHNICAL FACTS



## Tested to 5000

Dishwasher cycles

## 10x

The domestic standard for products used in the home



British Standard  
Mechanical dishwasher  
resistance

## Glazed Base

Although glazing the base of our ceramics adds complexity, it increases functional benefits to the customer. Glazing the base requires 'pin-firing'. This is when the piece sits on a crank to ensure the glaze coats the full base. The crank leaves small marks behind called 'maker's marks' signifying that the piece has a glazed base. Our fully glazed base can reduce surface scratching when the product is stacked, limiting the potential to become an entrypoint for bacteria.



# 05

## Quality & Conformance

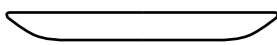
Dudson ceramics are continuously tested and quality checked, from the stage of raw materials, throughout the manufacturing process to the final fired piece.



### Impact & Edge Chip Resistance

We understand the importance of edge chip resistance and engineer our products to perform in the busiest environments. Strengthening impact areas and adding a rolled edge improves edge chip resistance.

#### TECHNICAL FACTS



11

We test our portfolio to 11 British, European and Global standards



International Standard  
Impact resistance of ceramic tableware



British Standard European Approved  
Determination of impact resistance

#### DID YOU KNOW?

We are a member of the BCC (British Ceramic Confederation), one of the leading bodies in ceramics.



British Standard European Approved  
Resistance to microwave heating



British Standard European Approved  
Thermalshock and thermal shock endurance



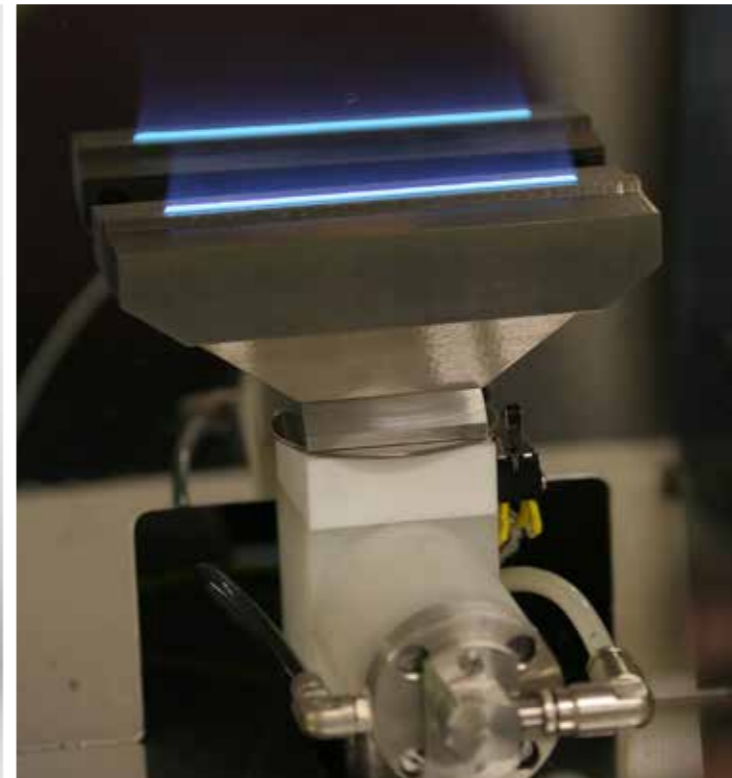
International Standard  
Lip and rim metal release



British Standard European Approved  
Lip and rim metal release from ceramic



British Standard  
Mechanical dishwasher resistance



### Dishwasher Durability

We test dishwasher durability to British Hospitality Standard BS 12875. In service testing has demonstrated that under hospitality use, this is the equal to 5000 dishwasher cycles. The equivalent of putting the same plate in the dishwasher everyday for 13 years.

### Continuous Improvement

Our continuous improvement program ensures we aim to constantly improve the quality of our products.



### In House Laboratory

We test daily in our inhouse UKAS accredited lab:

- 01 Our Performance Materials - China Clay, Alumina, Ball Clay, Fillers and Fluxes
- 02 Engineered Shape and Form - Size, Shape and Stackability Size and Shape Consistency
- 03 Vitrification - Water Absorption
- 04 Glazing - Dishwasher, Glazing and Thermal Stability
- 05 Quality and Conformance - Edge Chip Resistance

# 06

## Design Innovation

---

Dudson are experts in ceramic design and at the forefront of innovation. Our entire product portfolio is designed in the UK by our experienced and talented design team. We work with chefs from around the world ensuring we understand the needs of our customers.

## Industry Knowledge

---

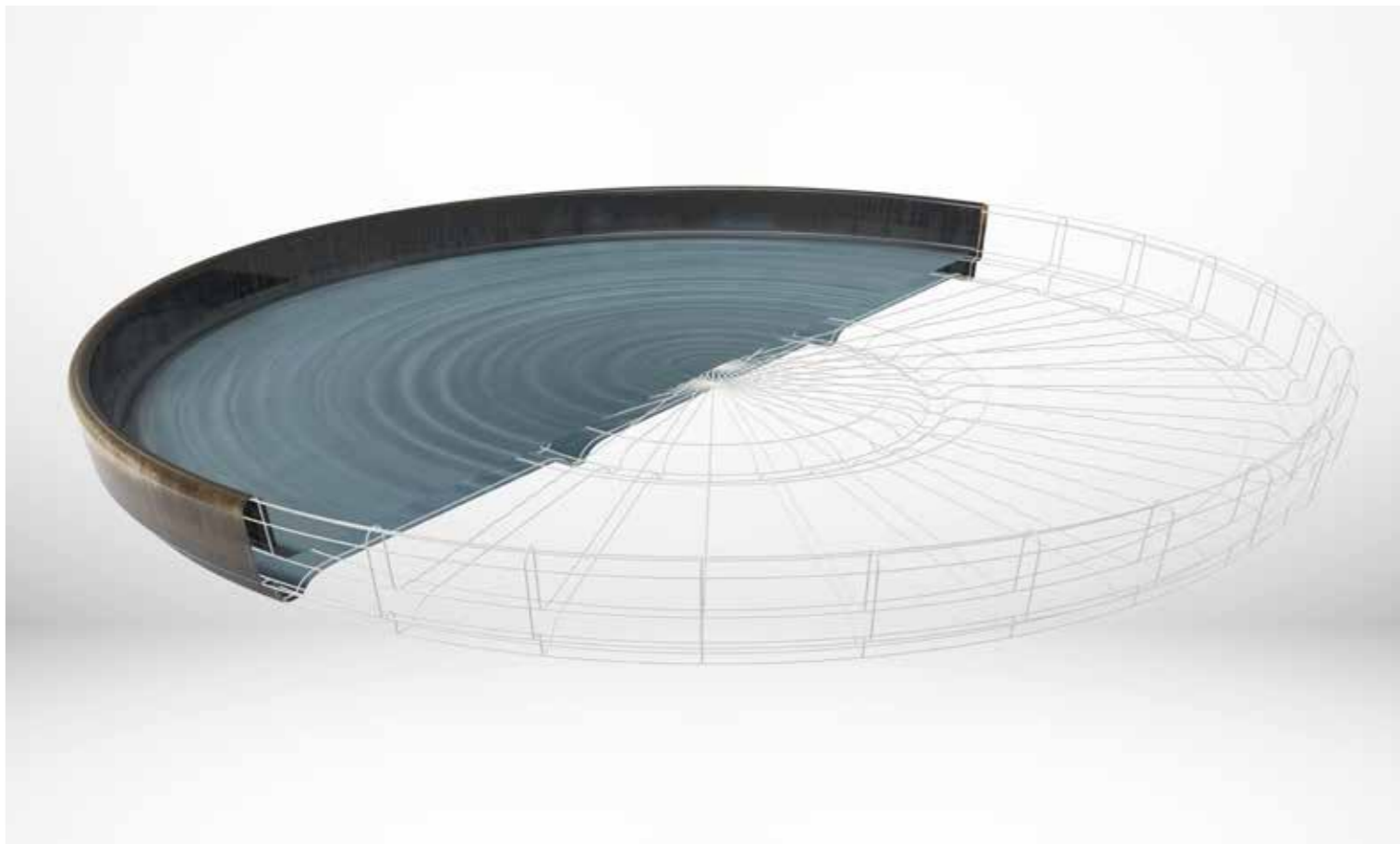
We invest in gathering extensive market knowledge. Our research team identifies and tracks new and existing trends in interior and product design, as well as the hospitality and food industries.



### DID YOU KNOW?

Dudson have launched over 400 products since 2019

---



## Leading Capabilities

---

Investment in the latest manufacturing technology, including the biggest installation of pressure cast machines in the UK and amongst the largest in Europe, allows us to combine original techniques with innovative shapes and larger pieces.



## Research and Development

---

We are continually developing materials that bring colour, texture and pattern to the tabletop without compromising on the durability that the hospitality industry demands.

## Machinery & People

---

A perfect balance of machinery and people. We combine up to date manufacturing technologies with historical ceramic techniques in order to innovate with design.



# 07

## Service & Stock

At Dudson we are dedicated to reliability, ensuring our product is in stock and delivered on time. We pride ourselves on our stock levels and ability to deliver on time, all around the world.



## Dynamic Warehouses

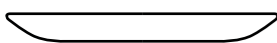
Our 130,000sq ft warehouse stores over seven million products. We process 44,000 cartons of product weekly across multiple brands, that's an average of 72,000 pieces everyday.

We have warehouses located in:

Stoke-on-Trent, UK  
Rotterdam, Netherlands



### TECHNICAL FACTS



130,000ft

Warehouse

99.4%

of orders delivered complete on time.



## Global Distribution Network

We supply to over 40 countries around the world via a network of 190 distributors.

# 08

## History & Heritage

---

A heritage brand dating back to 1800, Dudson is made by renowned potters in the heart of Stoke on Trent, the world capital of ceramics.



### Centuries of Manufacturing Knowledge

---

Dudson is made by expert potters in Stoke on Trent with over 225 years ceramics experience, since Sampson Bridgwood first manufactured earthenware in 1795, Longton, Stoke on Trent.



### The World Capital of Ceramics

---

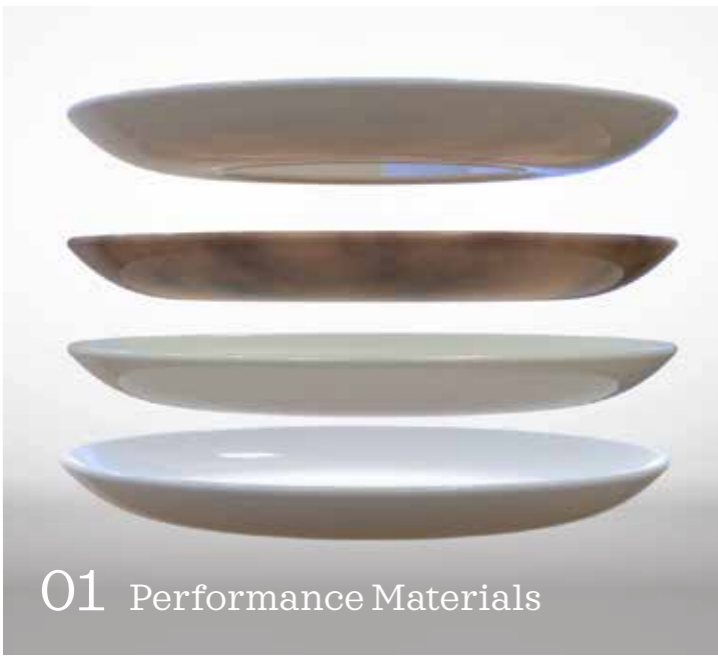
Our home Stoke on Trent is the world capital of ceramics. The city is known globally as 'The Potteries'.



### A Blend of Science & Skill

---

Our past has shaped our future, established in 1800, the Dudson brand continues to grow and innovate. We have evolved and adapted to changes in the marketplace, introducing multiple manufacturing routes to produce colour and texture as well as investing in new technology to create differentiated shapes.



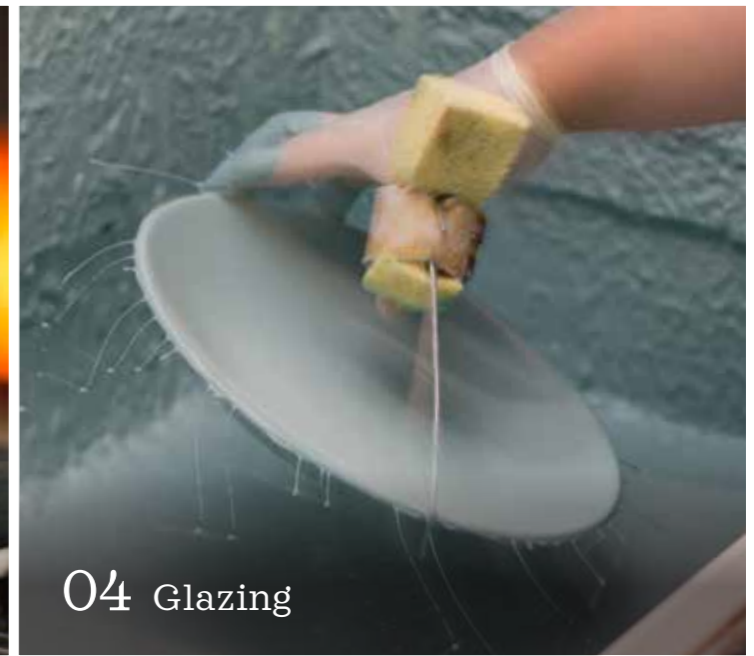
01 Performance Materials



02 Engineered Shape & Form



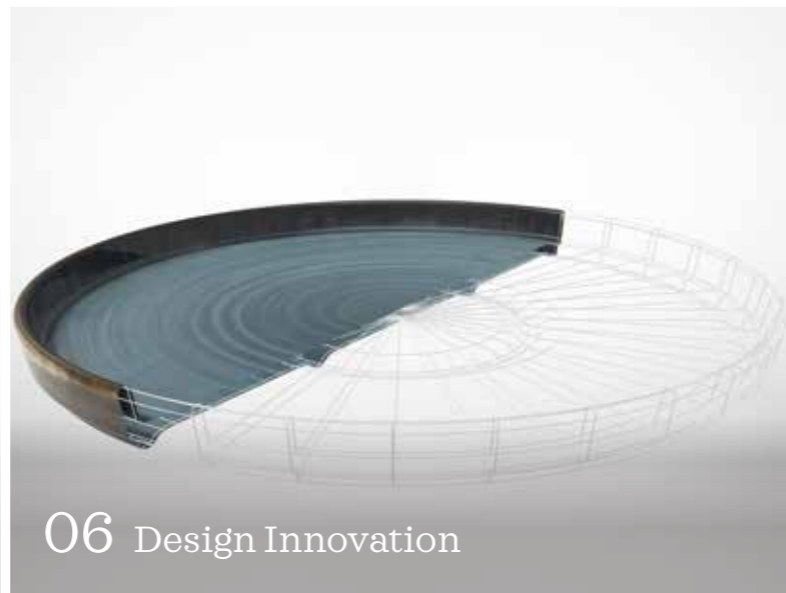
03 Vitrification & Firing



04 Glazing



05 Quality & Conformance



06 Design Innovation



07 Service & Stock



08 History & Heritage

### 8 Reasons Why A Dudson Plate Is Made To Last

We blend centuries of experience with the latest technology and design innovation to ensure our products work as hard as you do.

### Contact Us

Tel: +44 (0) 1782 577 566  
Fax: +44 (0) 1782 524 355  
Email: info@dudson.com

### Follow us on Social Media

f dudson1800 @ dudson1800 t Dudson1800

### Visit our Showrooms

HEADOFFICE&STOKESHOWROOM  
Churchill China (UK) Ltd  
No. 1 Marlborough Way  
Tunstall  
Stoke-on-Trent  
ST6 5NZ

LONDON SHOWROOM  
Churchill China (UK) Ltd  
Business Design Centre  
Suite 102  
52 Upper Street  
Islington  
London  
N1 0QH

dudson.com

f dudson1800 @ dudson1800 t Dudson1800

**Tel: +44 (0) 1782 577 566**  
**Fax: +44 (0) 1782 524 355**  
**Email: [info@dudson.com](mailto:info@dudson.com)**

**HEAD OFFICE & STOKE SHOWROOM**

Churchill China (UK) Ltd  
No. 1 Marlborough Way  
Tunstall  
Stoke-on-Trent  
ST6 5NZ

**LONDON SHOWROOM**

Churchill China (UK) Ltd  
Business Design Centre  
Suite 102  
52 Upper Street  
Islington  
London  
N1 0QH



In the printing of this brochure, every effort has been made to ensure perfect reproduction of product colours, but due to printing limitations they may not be an exact match to the actual product .

 is a registered trademark of Churchill China PLC (Since April 2019)

