MASTER CTS

ASATEEN GROUP

CONTROLLED TECHNICAL EDITION

MASTER BRICK

Technical Data Sheet (DF-01)

Concise technical reference for controlled circulation, specification use, and quick technical review.

Edition: V1.0

MASTER CTS - a division of ASATEEN GROUP

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Contents

MASTER BRICK

Technical Data Sheet (DF-01)

MASTER CTS - Construction Technology Systems - A Division of ASATEEN GROUP

1. Product Identity

Field	Value
Product Name	Master Brick
System Classification	Fired clay architectural façade system
Institutional Hierarchy	MASTER CTS — Construction Technology Systems — A Division of ASATEEN GROUP
Material Category	Fired clay unit
Product Basis	Façade and architectural cladding system

2. Technical Overview

Master Brick is a fired clay architectural facade system based on the Chafqim manufacturing method for facade, decorative, restoration, and hardscape applications. It is a high-density unit with controlled dimensional tolerance, low water absorption, and high compressive strength.

3. Product Description

Master Brick is a Category A fired clay architectural unit with natural color stability, no artificial colors, low efflorescence, and resistance to weathering, erosion, and acid exposure. Units are manufactured with controlled dimensional precision.

4. Composition / Material Basis

Parameter	Value	Notes
Material Basis	Fired clay (Chafqim)	Primary material
Classification	Category A (First Grade)	Architectural unit
Color Basis	Natural color stability	No artificial pigments
Chemical Condition	Free from salts and reactive impurities	Clean composition
Efflorescence	Very low	Clean finish
Thermal Behavior	High thermal mass	Passive insulation behavior

5. Key Technical Properties

Property	Value	Unit	Notes
Standard Dimensions	310 × 70 × 25	mm	Custom sizes available
Dimensional Tolerance	±2	mm	Controlled tolerance
Bulk Density	1030–1960	kg/m³	HD classification
Compressive Strength	66–130	MPa	Performance range
Water Absorption	7	%	Measured value
Weight per Brick	0.5–1.0	kg	Varies by type
Weight per Area	20–40	kg/m²	System dependent

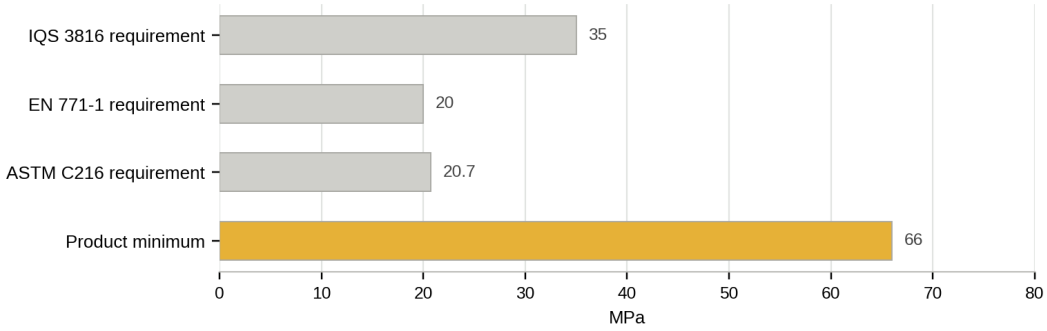
6. Series Classification Data

6.1 Quality Indicators by Series

Series Name	Model	Density Class	Density (kg/m³)	Weight (kg)
English Brick	EN10	HD	1120	1.1
	EN11	HD	1120	1.1
	EN12	HD	1120	1.1
	EN13	HD	1120	1.1
	EN14	HD	1120	1.1
	T22	HD	1120	1.1
Mistyrose	G44	MD	900	0.5
	D12	HD	1030	1.0
Orange	F11	MD	960	0.8
	P	HD	1000	0.9
Yellow	Z10	HD	1030	1.1
	Z14	HD	1030	1.1
	Z15	HD	1030	1.1

7. Performance Characteristics

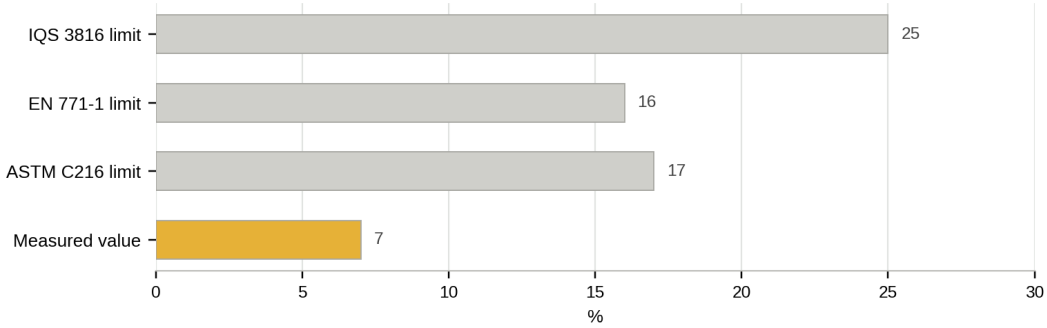
7.1 Compressive Strength



Requirement threshold versus measured product minimum. Chart shown as a linked evidence aid for the table below.

Standard	Requirement	Performance	Margin
IQS 3816	≥35 MPa	66–130 MPa	+88% to +271%
EN 771-1	≥20 MPa	66–130 MPa	+230% to +550%
ASTM C216	≥20.7 MPa	66–130 MPa	+219% to +528%

7.2 Water Absorption



Standard absorption limits versus measured value. Lower measured value indicates performance below the listed limits.

Standard	Limit	Performance	Margin
IQS 3816	≤25%	7%	72% below limit
EN 771-1	≤16%	7%	56% below limit
ASTM C216	≤17%	7%	59% below limit

7.3 Performance Notes

Characteristic	Statement
Density Class	High-density classification
Thermal Response	High thermal mass behavior
Surface Performance	Low efflorescence and weather resistance
Fire Behavior	Non-combustible material

8. Application Areas

Application	Description
External Cladding	Residential and commercial façades
Internal Decoration	Decorative walls
Restoration	Heritage and architectural restoration
Infrastructure	Public and institutional buildings
Hardscape	Pedestrian and light vehicular applications

9. Application Method / Usage Guidance

9.1 System Components

Component	Function	Consumption
MASTER GLUE	Adhesive bonding	4–6 kg/m²
MASTER JOINT	Joint filling	5–7 kg/m²
MASTER NANO	Surface protection	0.01–0.0125 L/m² (concentrate basis)
Spacers	Joint control	10 mm spacing

9.2 Installation Method

Step	Description
Surface Preparation	Clean and stable substrate
Adhesive Application	Apply MASTER GLUE uniformly
Brick Placement	Align using spacers
Joint Filling	Apply MASTER JOINT after curing
Surface Treatment	Apply MASTER NANO protective coating

10. Storage / Site Handling

Item	Requirement
Storage	Dry and ventilated area
Protection	Protect carton packaging from water penetration when stored outdoors
Stacking	Max height 3 m
Handling	Avoid impact and dropping

11. Referenced Test Methods / Standards

Standard	Scope
IQS 3816	Classification requirements
EN 771-1	Density and durability
ASTM C216	Severe weathering grade

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MASTER CTS

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