



LIBUSUN

ARCHITECTURAL SURFACE SYSTEMS

TECHNICAL DATA SHEET (TDS)



PRODUCT CATEGORY	Architectural Surface Systems
PRODUCT NAME	LIBUSUN Flexible Stone & Architectural Surface Collections
INTENDED USE	Exterior and Interior Wall Cladding

⌘ COLLECTIONS COVERED

This Technical Data Sheet applies to LIBUSUN Flexible Stone & Architectural Surface Collections intended for interior and exterior applications.

EXTERIOR COLLECTIONS

- ➔ Travertine Core Collection
- ➔ Limestone / Concrete Modern Collection
- ➔ Slate Accent Collection
- ➔ Marble Design Collection
- ➔ Granite / Dacite Universal Collection

EXTERIOR COLLECTIONS

- ➔ Architectural Concrete Collection
- ➔ Art Stone Collection
- ➔ Quartzite / Onyx Accent Series
- ➔ Textured Marble Panels
- ➔ Architectural Limestone & Travertine Collection
- ➔ Core Marble & Limestone Collection
- ➔ Architectural Color Surfaces
- ➔ Universal Stone Selection

*Technical characteristics may vary by collection and surface finish.
Refer to project-specific documentation when required.*

1. PRODUCT DESCRIPTION

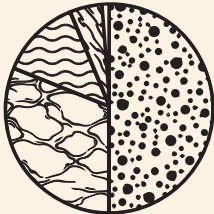
LIBUSUN Architectural Surface Systems are lightweight architectural wall cladding solutions engineered to replicate the appearance, texture, and visual depth of natural stone, concrete, and decorative architectural finishes while reducing structural load and simplifying installation.

The panels are manufactured using a mineral-polymer composite technology that combines natural aggregates with advanced polymer binders, resulting in a durable, weather-resistant, and environmentally responsible architectural finish.

Suitable for both new construction and renovation projects.

2. MATERIAL COMPOSITION

Component	Typical Content
Natural Colored Sand & Mineral Aggregates	~50%
Mineral Stone Powder	~30%
Polymer Binder System	~15%
Water	~5%
Performance Additives	<1%





3. TECHNOLOGY

ADVANCED MINERAL-BASED COMPOSITE SURFACE TECHNOLOGY

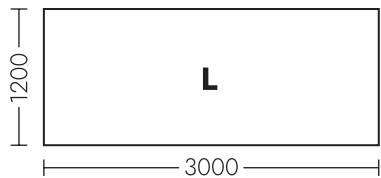
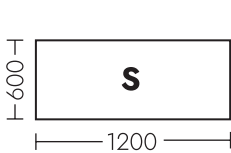
LIBUSUN Architectural Surface Systems utilize advanced mineral-based composite surface technology engineered to replicate the appearance, texture, and visual depth of natural stone, concrete, and architectural finishes while maintaining lightweight construction and simplified installation.

The system combines natural mineral aggregates, stone powders, polymer binders, and performance additives to create durable architectural surfaces suitable for both interior and exterior applications.

Technical characteristics may vary depending on collection, texture, finish, and intended application.

4. STANDARD PANEL SIZES

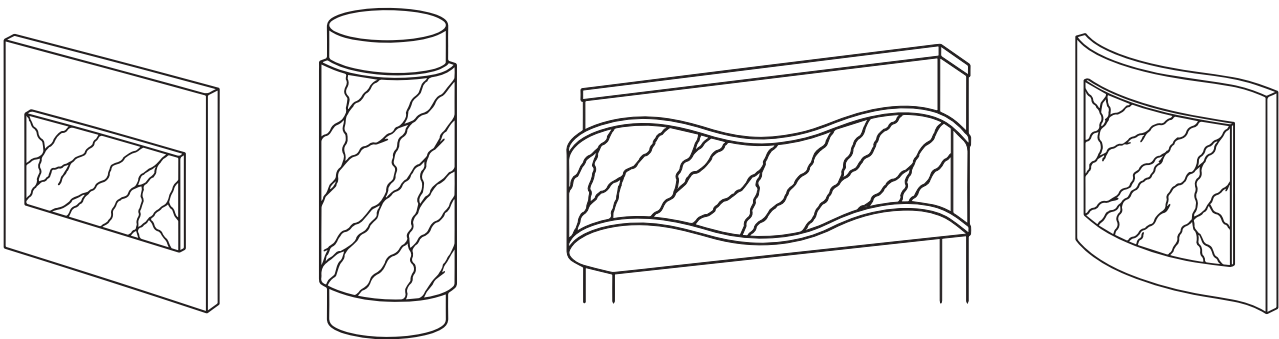
Format	Metric	Imperial	
S	600 × 1200 mm	24" × 48"	
M	1200 × 2400 mm	48" × 96"	
L	1200 × 3000 mm	48" × 118"	* Custom sizes available upon request.



Nominal dimensions. Tolerance ±2 mm.

5. PHYSICAL PROPERTIES

PROPERTY	TYPICAL VALUE
Thickness	2 – 5 mm (0.08"–0.20")
Weight per pc	Typically 3–8 kg/m ² depending on collection, format, and surface finish.
Flexibility	High
Water Resistance	Suitable for wet and dry architectural environments
UV Resistance	Designed for long-term exterior exposure
Freeze-Thaw Resistance	Designed for varying climate conditions
Impact Resistance	Suitable for architectural wall applications
Breathability	Yes
Fire Performance	Fire performance classification and test reports are available upon request and subject to project-specific requirements.





6. KEY PERFORMANCE FEATURES

LIGHTWEIGHT

Substantially lighter than traditional natural stone systems.

FLEXIBLE

Can conform to curved architectural surfaces.

WEATHER RESISTANT

Suitable for exterior exposure.

FREEZE-THAW RESISTANT

Designed for varying climate conditions.

UV STABLE

Designed for exterior exposure and long-term UV stability.

BREATHABLE

Allows moisture vapor transmission.

EASY FABRICATION

Can be cut using standard installation tools.

SUSTAINABLE

Low material consumption and reduced transportation weight.

7. APPLICATIONS

- Residential
- Multifamily
- Hospitality
- Commercial
- Mixed-Use
- Retail
- Restaurants
- Resorts



8. COMPATIBLE SUBSTRATES

EXTERIOR

- Cement Board
- Fiber Cement Board
- Concrete
- Masonry
- Cement Render

INTERIOR

- Gypsum Board
- Cement Board
- MDF (Dry Areas)
- Plywood

9. SYSTEM COMPONENTS

RECOMMENDED LIBUSUN SYSTEM

Required Components

- LIBUSUN Flexible Stone Adhesive
- LIBUSUN Surface Panels

Optional Installation Components

- Suitable Primer (where required)
- LIBUSUN Premium Grout

Optional Protection

- LIBUSUN Stone Protection Sealer

10. STORAGE & HANDLING

Store flat in a dry environment.

Protect from:

- ✗ Direct sunlight
- ✗ Excessive moisture
- ✗ Physical damage

**Do not bend beyond recommended installation radius.*

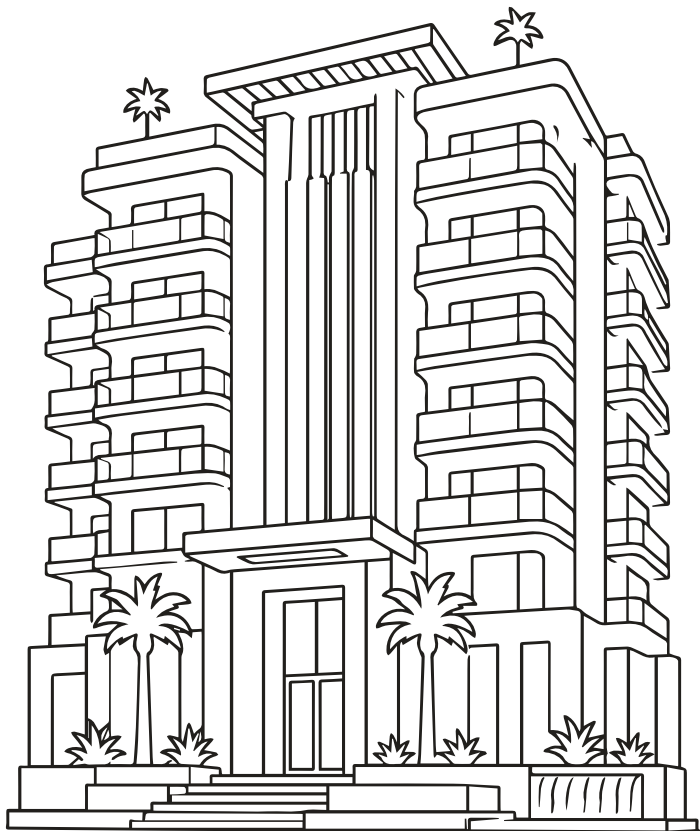
11. ENVIRONMENTAL INFORMATION

- No added formaldehyde
- Mineral-based composition
- Low-VOC potential
- Suitable for sustainable building projects
- Lightweight construction reduces transportation-related emissions.
- Designed as an alternative to traditional natural stone cladding.



12. WARRANTY

Warranty terms available upon request and subject to approved installation methods and project conditions. Warranty coverage varies by project type, installation method, and environmental exposure conditions.



DESIGNED *FOR*
MODERN ARCHITECTURE.

BUILT *FOR*
PERFORMANCE.