



# SPACE CONFIGURATOR

Product Technical Sheet

## ◆ General Description

An intuitive web-based tool for planning, customizing, and quoting space layouts in real-time. The application allows modular construction, use of templates, material simulation, and insertion of technical points (water, gas, electricity). It also enables exporting visual and budget outputs, with real-time price updates.

## ◆ Key Functionalities

### Application Interface

- **Home Screen:**
  - Store identification
  - User identification
  - Application version
- **Options Screen:**
  - Start a new project (2D layout)
  - Select a template
  - Access space design history
- **3D Layout Screen:**
  - Create and edit space designs
  - Save project
- **Quotation Screen:**
  - Add extra products
  - Send quote via email
  - Export to PDF and Excel
  - View realistic 3D render

## ◆ 2D Layout Features

- Draw the space by defining:
  - Height, width, length
  - Add elements (windows, doors, pillars)
  - Insert technical points (water, gas, electricity)

## ◆ 3D Layout Features

- Modify space dimensions
- Drag & drop predefined or custom furniture sets
- Define materials and colors
- Apply finishes to walls, floors, and ceilings
- Configure skirting boards, countertops, handles, and runners
- View itemized and total pricing in real time

## ◆ Application Output

- 2D images (floor plans and elevations)
- 3D images (multiple angles)
- 360° images (interactive viewpoints)
- PDF and Excel exports
- Email sending
- Sales editing

## ◆ Quoting Module

Detailed pricing for:

- Materials: walls, floors, ceilings
- Objects: furniture, decorations, appliances

## ◆ Administrative Backoffice

- User and store management
- Create and edit templates
- Upload and manage:
  - Colors and materials
  - Procedural parts and furniture sets
  - Groups and icons
  - Assets
- Rule and restriction management
- General or per-store metrics
- Database change log

## ◆ Technology

- Based on WebGL platform -fully web-based (no installation required)
- PC with installer
- All modeled elements are measurable and quotable

## ◆ Market Simulator Comparison

Simulator	Quoting	Realistic Images	Space Personalization	Own Catalog
IKEA Planner	✗	✗	Partial	✓
Leroy Merlin	✗	✗	Partial	✓
Planner 5D	✗	✗	✓	✓
Revisi VR Sim	✗	✓	✗ (fixed layouts)	✓
<b>This Product</b>	✓	✓	✓ (full customization)	✓

## ◆ Application Requirements

### Supported Platforms:

- Windows App:
  - Windows 10 or 11 (64-bit)
  - Internet connection required
- Web Access (optional):
  - Modern browser (Chrome, Edge, Firefox, etc.)
  - Internet connection required

### Minimum Hardware (for Windows App):

- CPU: Intel Core i5 or equivalent
- RAM: 8 GB
- Disk: 10 GB free (more may be required depending on catalog size)

## ◆ System Infrastructure

### Core Technologies:

- .NET (LTS implementation)
- REST API for system functionalities
- WebSocket communication for real-time interaction
- SQL-based database for data and simulation history
- Object/file storage system for large 3D assets

### Identity & Access:

- Supports external identity providers (OAuth, SAML, etc.)
- Optional in-house user management

### Price Integration:

Capable of fetching pricing data via:

- Commercial APIs
- Custom-defined methods

### Cloud Compatibility:

- Azure (primary target)
- Fully compatible with AWS and Google Cloud Platform

## ◆ Backoffice System

### Environment:

- Cloud-based, accessible via browser
- Implemented in Node.js

### Behavior:

Administrative and content changes may propagate:

- In real-time via WebSocket
- Or as scheduled/delayed updates to the application

## ◆ Renderer Requirements

### Deployment:

- Windows Server with GPU (NVIDIA GTX 1070 or later)
- Internet connection required

### Communication:

- Uses WebSocket for job coordination and result delivery

### Cloud Compatibility:

Compatible with GPU-enabled instances on:

- Azure
- AWS
- Google Cloud

## ◆ Opportunity | Client Advantages

- Real-time cost estimation by component and material
- Modular and fully customizable space configuration
- Realistic 3D and 360° images
- Full export options and commercial proposal delivery
- Complete and customizable backoffice for the client