

FRONT PANELS ▪ ENCLOSURES ▪ MILLING PARTS



AI ASSISTANT SETUP AND USAGE

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FRONTDESIGN CONTROLLED WITH AI ASSISTANT

FrontDesign can now be operated using an AI assistant. Instead of placing each element individually, you describe your front panel in plain language — the assistant translates your instructions directly into FrontDesign.

Example: You write "Create an aluminum front panel 200 x 150 mm with a 10 mm hole in the center" — and FrontDesign creates exactly that.

REQUIREMENTS

1. FrontDesign (installed and ready to use)

2. A Claude client. Recommended:

- Claude Desktop (Windows, macOS) — graphical application:

<https://claude.ai/download>

- Claude Code — command-line tool for Linux, macOS, and Windows, installation via npm (see Step 1).

Note: For use with FrontDesign, we recommend a paid Anthropic plan (Pro or higher). The free plan is significantly limited in message count and context size and is not suitable for longer CAD sessions. Claude Code requires a paid plan or API credits.

3. FrontDesign extension A small add-on file (.mcpb) that connects Claude with FrontDesign.

Available for Windows, macOS, and Linux.

Download:

Windows: <https://www.schaeffer-ag.de/downloads/mcp/fpd-mcp-1.0.1-windows.mcpb>

Mac: https://www.schaeffer-ag.de/downloads/mcp/fpd-mcp-1.0.1-macos_amd64.mcpb

Mac: https://www.schaeffer-ag.de/downloads/fpd-mcp-1.0.1-macos_arm64.mcpb

Linux: <https://www.schaeffer-ag.de/downloads/mcp/fpd-mcp-1.0.1-linux.mcpb>

STEP 1: INSTALL CLAUDE

Option A — Claude Desktop (Windows, macOS):

- a) Open <https://claude.ai/download> in your browser.
- b) Download the version for your operating system (Windows or macOS).
- c) Run the downloaded file and follow the installation steps.
- d) When launching for the first time, you will be prompted to sign in to Anthropic or create an account. Follow the on-screen instructions.
- e) After logging in, you will see the Claude Desktop chat window. The application is now ready to use.

Option B — Claude Code (Linux, macOS, Windows):

- a) Install Node.js (if not already installed), then install Claude Code via npm:

```
npm install -g @anthropic-ai/claude-cod
```
- b) Start Claude Code and sign in with your Anthropic account:

```
claude
```

STEP 2: SET UP THE FRONTDESIGN EXTENSION

- a) Start FrontDesign on your system.
FrontDesign must be running before the connection can be established.

Claude Desktop (Windows, macOS):
- b) Open Claude Desktop.
- c) Go to: Settings > Extensions > Add
(in the English interface: Settings > Extensions > Advanced Settings > Install Extension)
- d) Select the .mcpb file provided by Schaeffer AG.
Make sure to choose the correct file for your operating system

(Windows or macOS).
- e) The connection is usually established automatically;
if not, restart Claude Desktop once.
- f) You can verify the active connection when "FrontDesign Panel Editor" appears as connected in the Extensions section.

Claude Code (Linux, macOS, Windows):

b) Start Claude Code in a terminal and write something like:

```
"Set up the FrontDesign extension for me. The .mcpb file is located at ~/Downloads/fpd-mcp-linux.mcpb"
```

(Adjust path and filename for your operating system.)

Claude Code will automatically extract the .mcpb file, locate the FrontDesign binary, and add the connection to its configuration.

c) Check the connection with:

```
/mcp
```

"FrontDesign Panel Editor" should appear in the list.

STEP 3: GETTING STARTED

Simply enter your instructions as text in the Claude Desktop chat window or directly in the Claude Code prompt. Here are a few examples to try:

Example 1 — Create a new front panel:

```
"Create a new front panel, 200 x 150 mm, material aluminum, 2 mm thick, natural anodized."
FrontDesign opens a new panel with the specified dimensions and material properties.
```

Example 2 — Add holes and labeling:

```
"Add a 10 mm hole at position 50, 75.
Label the panel with the text 'POWER' at position 100, 50, font size 8 mm."
FrontDesign places the hole and the text engraving at the specified positions.
```

Example 3 — Query an existing design:

```
"Show me all elements on the current front panel with their positions and types."
Claude lists all elements clearly, including coordinates, dimensions, and element types.
```

You can give arbitrarily complex instructions. The assistant supports, among others:

- Holes (threaded, countersunk, blind holes)
- Rectangular cutouts, D-holes, slots
- Text engravings and graphics
- Buttons, screws, press-fit nuts
- Moving, rotating, mirroring, and duplicating elements
- Querying materials, colors, and thicknesses

TIPS AND TROUBLESHOOTING

Connection does not work:

Make sure FrontDesign is running before working in Claude. Without a running FrontDesign instance, no connection can be established.

Connection was active and got interrupted:

In Claude Desktop: Disable the extension and enable it again. In Claude Code: Restart Claude Code. If FrontDesign was closed in the meantime, start it again first. The extension will automatically detect the new connection port.

Commands are not executed:

Some functions require an open front panel. Type "Create a new front panel" to create one.

Positions and dimensions:

All dimensions are specified in millimeters. Positions refer to the lower-left corner of the front panel (X = horizontal, Y = vertical).