### 1.1 System requirements for V2025

\* Subject to change without notice. Updated PC recommendations can be found on the cadwork website.

## General

This document serves as the basis for Version 2025. The minimum requirements for Version 2025 do not necessarily apply to future versions.

## **Operating System**

Windows<sup>®</sup>11 and Windows<sup>®</sup>10 in the 64-bit version are supported. **Windows<sup>®</sup>** 11 Home, Pro or Enterprise are recommended.

Windows<sup>®</sup>10 will be incompatible from Version 2026, as Microsoft will discontinue support for this operating system on 14th October 2025.

Further information can be obtained via the link: End of Support for Windows<sup>®</sup> 10.

Older operating systems (e.g. **Windows<sup>®</sup>8**, **Windows<sup>®</sup>8.1**, **Windows<sup>®</sup>7**, **Windows<sup>®</sup>XP**) and other operating systems (e.g. **Apple**, **Linux**) are also **not supported** for Version 30 and higher.

## Windows User Account

Cadwork **strongly recommends** avoiding special characters (é, è, à, ä, ö, ü) in Windows user names (local account or Microsoft 365 account). For Microsoft 365 accounts, these characters should be avoided for the user's first and last name and email address. In the case of a Windows login via the Microsoft 365 account, these characters appear in important folders and could lead to problems.

### Processor

Cadwork only supports x64-bit processors. **ARM processors**, such as the **M1** and **M2** chips on Apple computers or some Windows Surfaces (with ARM processor) are therefore **not supported**.

We support all Intel<sup>®</sup> processors from Intel<sup>®</sup> Core<sup>TM</sup> i7, 8th generation, as well as AMD<sup>®</sup> Ryzen<sup>®</sup> processors from the 5000 series. We recommend Intel<sup>®</sup> Core<sup>TM</sup> i7, 11th generation for a *Optimum Range* and Intel<sup>®</sup> Core<sup>TM</sup> i9, 11th generation for a *High Range* configuration (see below).

Processors with a high clock frequency from 3.5 GHz for workstations and 2.6 GHz for laptops are recommended. A high clock frequency is generally preferable to the number of cores.

Customer feedback has shown that Intel<sup>®</sup> Xeon<sup>®</sup> processors offer less performance than an Intel<sup>®</sup> Core<sup>TM</sup> processor for working on cadwork files. We have not received any feedback on the new generations of Intel<sup>®</sup> Xeon<sup>®</sup> processors.

Further information on the processor specifications can be found under the following links:

• Guide to Intel<sup>®</sup> Processor and Designation

• Specifications of AMD<sup>®</sup> Processors

## **Graphics Card**

Graphics cards from the NVIDIA Quadro<sup>®</sup> graphics processor series RTX, RTX A or the latest NVIDIA GeForce<sup>®</sup> RTX are recommended. The graphics card should have a minimum of 4 GB of graphics memory, 8 GB for a *Optimum Range* and 12 GB for a *High Range* configuration.

The driver should be up-to-date (not older than 6 months). We recommend the drivers of the "Download type: Production Branch/Studio".

A graphics card with old technology can cause problems after a version change. The reasons for this are that the manufacturers may no longer supply up-to-date drivers or that the card technology is no longer compatible with the updates of our graphics kernel (Hoops) from Tech Soft 3D.

For use with multiple displays (2 or more), we recommend the NVIDIA Quadro<sup>®</sup> RTX series or NVIDIA GeForce<sup>®</sup> RTX. These have been tested and work without any problems (assuming a suitable driver). It is also important to check whether the graphics card supports the number of displays with their respective resolutions and whether the number of video outputs is sufficient.

All other graphics cards have not been tested and may therefore cause issues with display and/or performance.

Intel<sup>®</sup> Iris<sup>®</sup> Xe graphics cards are not recommended.

Further information on NVIDIA graphics cards can be found under these links:

- GeForce<sup>®</sup> Graphics Card Comparison
- NVIDIA RTX PRO for Laptops

Further information on AMD graphics cards can be found under this link:

• AMD Radeon<sup>TM</sup> RX Graphics Cards

### Displays

Experience shows that using multiple dispalys saves significant time and improves comfort, both when working with CAD software and when using your PC for office applications. Therefore, you should look for two (or more) video outputs on your graphics card.

You'll need to ensure the **minimum resolution** is Full HD (1920x1080 pixels). For optimal performance, all displays should use the same resolution and scaling in Windows<sup>®</sup>.

Cadwork has tested the following settings:

- For 4k screens (3840x2160 pixels), a screen diagonal of at least 32" and a graphics card that supports the number of screens with their respective resolution is required. The scaling in Windows should be a maximum of 150%. In addition, the icons in the menus may be blurred.
- For **2k screens** (**2560x1440 pixels**), a screen diagonal of at least **27"** and a graphics card that provides support for the number of screens with their respective resolution is required. The scaling in Windows should be a maximum of **125%**. In addition, the icons in the menus may be blurred.

• Full HD screens (1920x1080 pixels) require a screen diagonal of at least 15" and a graphics card that provides support for the number of screens with their respective resolution. The scaling in Windows must be exactly 100%. Otherwise, some dialogs may no longer be fully accessible.

#### **Docking Station**

The use of a **Docking Station** can lead to display and performance issues when using cadwork 3D. Displays must be connected directly to video output ports of the graphics card.

# Memory (RAM)

A minimum of 16 GB RAM is required. We strongly recommend 32 GB or more for optimal performance.

When using the IFC interface for BIM (Building Information Modelling) projects, 32 GB is the minimum. Depending on project size and complexity, 64 GB of RAM will be required.

In general, you should not try to save on memory.

# Hard Disk

Nowadays, the operating system and the programs used on a daily basis should be located on an SSD or NVME hard disk, as working times (backups, reading data, etc.) are reduced. The drive partition containing the Windows<sup>®</sup> operating system should have a minimum capacity of 512 GB, 1 TB for a *Optimum Range* configuration.

Regardless of their storage location, cadwork files are **always** copied to the system drive (usually the C:\ drive) when they are opened, where they are unpacked and processed. There must therefore always be enough free space on the system drive. The required amount of free disk space depends on the size and number of files opened. Other programs work in a similar way, this must also be taken into account.

#### Free disk space:

The minimum free space on the C:\ drive should never fall **below 40 GB**. Other programs and Windows<sup>®</sup> itself may no longer function properly if the C:\ drive is full. In the worst case, saving the file may no longer work. Check the free space on your operating system partition regularly.

In addition, cadwork advises against working directly on a removable disk. This applies all the more if the backup folder setting is located in the current folder. One wrong contact of the removable disk during the backup and both your file and your backup could be damaged.

### **Internet and Network**

Cadwork recommends the use of a broadband connection for installation and regular software updates. At least one workstation in the company must be connected to the internet to enable software updates and remote control of the hotline service via TeamViewer software. A gigabit network is recommended for server backups or for sharing catalogs and model files (User profiles).

# **Keyboard and Mouse**

Cadwork recommends a keyboard with an integrated numeric keypad (numpad) and a 3-button mouse (Left, Middle, Right, click wheel).

## **Photogrammetry / Point Cloud**

The *Minimum Range* in the following system requirements summary table is **not sufficient** to guarantee the required work performance.

### System Requirements - Summary for new PC purchase

For 3D application in timber construction (This table is only a complement to the rest of the article).

### Workstation

	Minimum Range	Optimum Range	High Range
Operating system	Windows <sup>®</sup> 11 64-bit Windows <sup>®</sup> 10 64-bit (will be incompatible for cadwork Version 2026)	Windows <sup>®</sup> 11 64-bit Windows <sup>®</sup> 10 64-bit ( <i>will be incompatible</i> for cadwork Version 2026)	Windows <sup>®</sup> 11 64-bit Windows <sup>®</sup> 10 64-bit <i>(will be incompatible for cadwork Version 2026)</i>
Processor (CPU)	Intel <sup>®</sup> Core <sup>TM</sup> i7-8700 3.20 GHz (4.60 GHz)	Intel <sup>®</sup> Core <sup>TM</sup> i7- 11700kf 3.60 GHz (5.00 GHz)	Intel <sup>®</sup> Core <sup>TM</sup> i9- 11900kf 3.50 GHz (5.30 GHz)
Graphics card (GPU)	NVIDIA T1000, 4GB NVIDIA GeForce <sup>®</sup> GTX 1630, 4GB	NVIDIA RTX 4000, 8GB NVIDIA GeForce <sup>®</sup> RTX 3050, 8GB	NVIDIA RTX A 2000, 12GB NVIDIA GeForce <sup>®</sup> RTX 4070Ti, 12GB
Memory (RAM)	16GB	32GB	64GB or 128GB
Hard disk	512GB SSD	1TB SSD	2TB SSD

### Laptop/Portable PC

#### Important:

To be able to use cadwork optimally, the laptop must be connected to the power supply.

If you are using a compatible Docking Station, in some cases it may be necessary to connect both the docking station and the laptop to the mains power.

Minimum R	ange	Optimum Range	High Range	

Operating system	Windows <sup>®</sup> 11 64-bit Windows <sup>®</sup> 10 64-bit ( <i>will be incompatible</i> for cadwork Version 2026)	Windows <sup>®</sup> 11 64-bit Windows <sup>®</sup> 10 64-bit ( <i>will be incompatible</i> for cadwork Version 2026)	Windows <sup>®</sup> 11 64-bit Windows <sup>®</sup> 10 64-bit ( <i>will be incompatible</i> for cadwork Version 2026)
Processor (CPU)	Intel <sup>®</sup> Core <sup>TM</sup> i7-8850h 2.60 GHz (4.30 GHz)	Intel <sup>®</sup> Core <sup>TM</sup> i7- 11370h 3.00 GHz (4.80 GHz)	Intel <sup>®</sup> Core <sup>TM</sup> i9- 13800H 4.10GHz (5.40 GHz)
Graphics card (GPU)	NVIDIA T1200 4GB NVIDIA GeForce <sup>®</sup> GTX 1630, 4GB	NVIDIA RTX A2000 8GB NVIDIA GeForce <sup>®</sup> RTX 3050, 8GB	NVIDIA RTX A 3000 12GB NVIDIA GeForce <sup>®</sup> RTX 4070Ti, 12GB
Working (RAM)	16GB	32GB	32GB or 64GB
Hard disk	512GB SSD	1TB SSD	2TB SSD

## In a Nutshell

The effective performance requirements depend greatly on the **Type of Work** (Academic, Professional, Mass timber, Panelized construction) and the **Size of Projects** that will be worked on.

The more performance the hardware offers, the larger the individual projects files can be without noticing a significant drop in performance and still processing at appropriate speed. This applies in particular to the selection of the Graphics Card (GPU) and Memory (RAM).

We are happy to support you in the evaluation of new devices or the assessment of existing stations. You can send us the configuration of the relevant computers for evaluation to the e-mail address below.

Before purchasing a computer or a new component, we recommend that you send the detailed technical specifications of the consider computer, as summarized in our table above, to your respective branch:

Cadwork branch	E-mail address
North America - Montreal CA (cadwork 14 clients)	montreal@cadwork.ca
Australasia - Bendigo AU (cadwork 15 clients)	support@cadworkaustralasia.com
Switzerland - Herisau CH (cadwork 02 clients)	support@cadwork.swiss

Austria - Breitenwang AU (cadwork 03 clients)	support@cadwork.at
Cadwork-04 (Switzerland / France / Belgium)	it@cadwork-04.ch
Germany - Hildesheim DE (cadwork 05 clients)	support@cadwork.de

Your cadwork team