

## 1.1.1 System requirements for V30 / V30 SP2024

\* Subject to change without notice. If in doubt, you can find latest system requirements on the cadwork website or contact your technical support.

### General

This document serves as the basis for version 30. The minimum requirements for V30 do not necessarily apply to future versions.

### Operating System

cadwork supports Windows<sup>®</sup> 11 and Windows<sup>®</sup> 10 64-bit versions. cadwork recommends **Windows<sup>®</sup> 11 Pro, Home or Enterprise**.

Windows<sup>®</sup> 8 and 8.1 will be not compatible for version 30 onwards due to the end of support provided by Microsoft on 10 January 2023.

Older systems (e.g. **Windows<sup>®</sup> 7, Windows<sup>®</sup> XP**) as well as other operating systems (e.g. **Apple, Linux**) are **not compatible** for version 30 and future versions.

### 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 last name, first name and e-mail address. In the case of a Windows login via the Microsoft 365 account, these characters will appear in important folders and could cause problems.

### Processor

cadwork supports x64 Bits processors only. **ARM processors**, such as the **M1** and **M2** chips on Apple computers or certain Windows Surfaces (with ARM processors) are therefore **incompatible**.

Intel<sup>®</sup> processors from Intel<sup>®</sup> Core<sup>™</sup> i7, 8<sup>th</sup> generation and AMD<sup>®</sup> Ryzen<sup>®</sup> processors from the 5000 series are compatible. cadwork recommends Intel<sup>®</sup> Core<sup>™</sup> i7, 11<sup>th</sup> generation processors for the "*Optimum Range*" and Intel<sup>®</sup> Core<sup>™</sup> i9, 11<sup>th</sup> generation processors for the "*High Range*".

cadwork recommends processors with a high base frequency of 3.5 GHz for workstations and 2.6 GHz for notebooks.

Generally speaking, frequency is preferable to the number of processor cores.

Customer feedback has shown that Intel<sup>®</sup> Xeon<sup>®</sup> processors bring less performance to cadwork than an Intel<sup>®</sup> Core<sup>™</sup> processor.

### Graphics Card

cadwork supports NVIDIA Quadro<sup>®</sup> RTX, RTX A or NVIDIA GeForce<sup>®</sup> RTX series graphics cards with a minimum of 4GB video memory, 8GB in the "*Optimum Range*" and 12GB in the "*High Range*".

The release date of the graphics card driver must be recent (less than 6 months). We recommend "Download Type: Production Branch / Studio" drivers.

A graphics card with relatively old technology can create problems after a version change. Manufacturers may no longer supply recent drivers, or the card's technology may no longer be compatible with updates to our graphics kernel (Hoops).

For use with multiple displays (2 or more), we recommend the NVIDIA Quadro® RTX or NVIDIA GeForce® RTX series. They have been tested and work with the appropriate graphics card driver.

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

Intel® Iris® Xe graphics cards are not recommended.

## Displays

Experience shows that using multiple displays saves a lot of time and improves productivity, both for cadwork and when using the PC for other purposes. Therefore, you should look for the presence of 2 (or more) video outputs on your graphics card. You will need to ensure that the **minimum resolution** is 1920x1080 pixels. All display should use the same resolution and scaling in Windows.

Cadwork tested the following configurations:

- For **4k screens(3840x2160 pixels)**, a minimum diagonal of **32 "** and a graphics card that supports the number of screens with their respective resolution is required. Windows scaling should be **150%** maximum. Beyond this, icons may be blurred in menus.
- For **2k screens(2560x1440 pixels)**, a minimum diagonal of **27 "** and a graphics card that supports the number of screens with their respective resolution is required. Windows scaling should be **125%** maximum. Beyond this, icons may be blurred in menus.
- For **Full-HD screens(1920x1080 pixels)**, a minimum diagonal of **15 "** and a graphics card that supports the number of screens and their respective resolutions is required. Windows scaling **must be exactly 100%**. Beyond this, some dialogs may no longer be fully accessible.

Using a Docking Station can cause problems when using cadwork. Displays must be connected **directly** to the graphics card.

## Memory (RAM)

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

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

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

## Hard Disk

These days, the operating system and the programs you use every day should be located on an SSD or NVME hard disk, as this will reduce the amount of time you spend backing up, reading data and so on.

The disk containing the Windows<sup>®</sup> partition should have a minimum capacity of 512GB. 1TB for the "Optimum Range".

Available storage space :

A minimum of 20GB of free space per cadwork version must be guaranteed on all hard disks (server and PC) to ensure that cadwork functions correctly (backup, installation, updates, settings, etc.).

Furthermore, cadwork advises against working directly on a removable hard disk. This becomes even more crucial if the backups folder is set to current folder. Loose or bad connection with the removable memory medium at backup time could result in your file as well as your backup file getting corrupted.

HDDs are not recommended for cadwork version 30.

## Internet and Network

cadwork recommends the use of a broadband connection for weekly program updates. At least one workstation in the company must be connected to the Internet to enable software updates and remote access for the support team via TeamViewer software. A Gigabit network is recommended for server-based backups, or for sharing catalogs and user files.

## Mouse and Keyboard

A mouse with at least 3 clickable buttons is required. Left, Middle (click wheel) and Right clicks are used everywhere in the software.

For laptops, a keyboard with an integrated numeric keypad is highly recommended, the same goes for an external keyboard.

## Photogrammetry / Point Cloud

To guarantee working performance, the "*Minimum Range*" in the table below is **not compatible**.

## System requirement summary for new PC purchase

For 3D Timber use (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 64Bit Windows <sup>®</sup> 10 64Bit	Windows <sup>®</sup> 11 64Bit Windows <sup>®</sup> 10 64Bit	Windows <sup>®</sup> 11 64Bit Windows <sup>®</sup> 10 64Bit

Processor	Intel® Core™ i7-8700 3.20 GHz (4.60GHz)	Intel® Core™ i7-11700kf 3.60 GHz (5.00GHz)	Intel® Core™ i9-11900kf 3.50 GHz (5.30GHz)
Graphics card	NVIDIA T1000, 4GB NVIDIA GeForce® GTX 1630, 4GB	NVIDIA RTX 4000, 8GB NVIDIA GeForce® RTX 3050, 8GB	NVIDIA RTX A 2000, 12GB NVIDIA GeForce® RTX 4070Ti, 12GB
Memory (RAM)	16GB	32GB	64GB or 128GB
Hard disk	512GB SSD	1TB SSD	2TB SSD

## Portable PC

	Minimum Range	Optimum Range	High Range
Operating system	Windows® 11 64Bit Windows® 10 64Bit	Windows® 11 64Bit Windows® 10 64Bit	Windows® 11 64Bit Windows® 10 64Bit
Processor	Intel® Core™ i7-8850h 2.60 GHz (4.30GHz)	Intel® Core™ i7-11370h 3.00GHz (4.80GHz)	Intel® Core™ i9-13800H 4.10GHz (5.40GHz)
Graphics card	NVIDIA T1200 4GB NVIDIA GeForce® GTX 1630, 4GB	NVIDIA RTX A2000 8GB NVIDIA GeForce® RTX 3050, 8GB	NVIDIA RTX A 3000 12GB NVIDIA GeForce® RTX 4070Ti, 12GB
Memory (RAM)	16GB	32GB	32GB or 64GB
Hard disk	512GB SSD	1TB SSD	2TB SSD

## In a nutshell

The required specifications for a computer depend greatly on the **type of work** (academic, professional, mass timber, panelised construction) and the **size of projects** that will be worked on.

The higher the hardware performance, the larger the individual projects files can be without losses on the processing speed. This applies in particular to the graphics card and memory (RAM).

We're happy to help you evaluate new or existing computers! You can send us the corresponding computer configuration for evaluation to the e-mail address below.

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

<b>Cadwork branch</b>	<b>E-mail address</b>
Canada - Montreal (cadwork 14 clients)	montreal@cadwork.ca
Australasia - Alice Springs (cadwork 15 clients)	support@cadworkaustralasia.com
Switzerland - Herisau (cadwork 02 clients)	support@cadwork.swiss
Austria - Breitenwang (cadwork 03 clients)	support@cadwork.at
Cadwork-04 (Switzerland / France / Belgium)	it@cadwork-04.ch
Germany - Hildesheim (cadwork 05 clients)	support@cadwork.de

Your cadwork team

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