This document lists the hardware and software requirements for installing and running CaliforniaX.

Single workstation with MS SQL server

Processor	AMD or Intel, x64 processor At least: 1,4 GHz with 2 cores (4 threads) **Recommended**: 2 GHz or faster with 4 or more cores
Working memory	At least: 3 GB **Recommended**: 6 GB or 12 GB when using the BIM-module. As the database size increases, the memory sitze should bei increased to ensure optimal performance.
Hard disk capacity	At least: 12 GB of available hard disk space. The required free hard disk space depends on the number and size of the projects or documents.
Screen resolution	At least: 1920x1080 pixels (Full HD) **Recommended**: 1920x1080 pixels (Full HD)
Optical drive	The installation files are provided in the standard way via the G&W Download Center. A DVD drive is only required if the delivery method is different.
Operating system	Supported: Windows 10 1507, Windows 11 Windows Server 2016, Windows Server 2025 **Recommended**: Windows 11 or Windows-Server 2025
SQL Server	Supported: MS SQL Server 2019 to 2025 Supplied: MS SQL Server 2012 Express Edition **Recommended**: MS SQL Server 2022 Standard or Standard Runtime
.NET Framework	.Net Framework 4.8
Network	The following SQL Server network protocols are supported: TCP/IP and Named Pipes.
Data backup	External storage media and a suitable backup program are recommended for backing up the CaliforniaX database.
Authorization	Administrative rights on the PC are required at the time of installation.
Internet	The use of some functions (access to awarding platforms, online help, G&W News, etc.) requires an Internet connection.

Workstation connected to an external MS SQL server

Processor	AMD or Intel, x64 prozessor At least**:** **Recommended:**	 1,4 GHz with 2 cores (4 threads) 2 GHz or faster with 4 or more cores
Working memory	At least: **Recommended:**	2 GB Minimum 6 GB or 12 GB when using the BIM module. As database size increases, memory should be increased to ensure optimal performance.
Hard disk capacity	At least:	2GB of available hard disk space.
Screen resolution	At least: **Recommended:**	1920x1080 Pixel 1920x1080 pixels (Full HD)
Operating system	Supported: **Recommended**:	Windows 10 1507, Windows 11 Windows Server 2016, Windows Server 2025 Windows 11 or Windows-Server 2025
.NET Framework	.Net Framework 4.8	
Network	The following SQL Server network protocols are supported: TCP/IP and Named Pipes.	
Data backup	Not required at the workstation. The CaliforniaX database is backed up at the database server.	
Authorization	Administrative rights on the PC are required at the time of installation.	
Internet	The use of some functions (access to tender platforms, online help, G&W News, etc.) requires an Internet connection.	

Remote workstation (Terminal Services Client)

Operating system	The remote desktop client is supported by most operating systems including Windows, Linux and Mac OS. The requirements of the selected system apply.	
Screen resolution	At least: **Recommended:**	1920x1080 pixels (Full HD) 1920x1080 pixels (Full HD)

Database server – MS SQL server

The scope of delivery includes a SQL Server 2022 Express Edition. The limitation of this free-of-charge Express edition are: 1 physical processor, 1 GB memory, 10 GB database size.
For 5-7 users or more, G&W recommends the use of a Standard / Standard Runtime Edition.

Processor	AMD or Intel, x64 processor At least**:** 1,4 GHz with 2 cores (4 threads) **Recommended:** 2 GHz or faster with 4 or more cores
Operating system	Supported: Windows 10 1507, Windows 11 Windows Server 2016, Windows Server 2025 **Recommended**: Windows-Server 2025
.NET Framework	The minimum required operating systems include the minimum required version of .NET Framework.
Network software	The supported operating systems for SQL Server have integrated network software. Named instances and default instances of a standalone installation support the following network protocols: shared memory, named pipes and TCP/IP.
SQL Server	Supported: MS SQL Server 2019 to 2025 Supplied: MS SQL Server 2022 Express Edition **Recommended**: MS SQL Server 2022 Standard or Standard Runtime
Working memory	At least: 2 GB **Recommended:** Minimum 4 GB or. 8 GB when using the BIM module. As the database size increases, the memory size should also be increased for optimal performance.
Hard disk capacity	SQL Server requires at least 8 GB of available hard drive space. The required free hard disk space depends on the number and size of the projects or documents.
Optical drive	The installation files are provided in the standard way via the G&W Download Center. A DVD drive is only required if the delivery method is different.
Data backup	External storage media and a suitable backup program are recommended for backing up the CaliforniaX database.

Database server – Oracle server

Oracle database servers are only supported with CaliforniaX Enterprise Edition.

Operating System and server requirements	Depends on the requirements of the Oracle database server version.
Network software	The supported operating systems for Oracle Server have integrated network software. The following Oracle network protocol is supported: TCP/IP TNSPING < 10 ms
Oracle version	Supported: Version 12.2.01, Version 19c **Recommended**: Version 19c
Character set	Single-byte character set: WE8MSWIN1252 or multi-byte character set: AL32UTF8
Oracle feature	Continuous Query Notification (for multi-user operation)
Authorisation	Administrative database rights are required at the time of installation. During initial installation, the password of the Oracle user SYSTEM must be known to the administrator.
Recommendations	Name of tablespace: CALIFORNIA_TS (recommended size: 32 GB) The database server should have already exist and run as a separate instance before CaliforniaX is installed.