

Install Instructions for SINDA/FLUINT and Thermal Desktop

This installation process will install SINDA/FLUINT and Thermal Desktop, which includes RadCAD, FloCAD, and TD Direct. These modules are only activated with the appropriate license files.

Before Installing

- 1. Verify your computer meets our **System Requirements**.
- 2. Ensure the person performing the installation has administrator rights.
- 3. Prior to installing, turn off User Account Control through the Windows Control Panel and restart the computer.

Prerequisite Software

SINDA/FLUINT requires an Intel Fortran compiler to be installed and Thermal Desktop requires AutoCAD to be installed. The Intel Compiler also requires one of the following to be installed:

- Microsoft Build Tools for Visual Studio 2019 or newer (recommended option)
- Microsoft Visual Studio 2019 or newer (Professional or Community version)
- 1. **AutoCAD**: Verify AutoCAD has been installed on the computer. Open it at least once to verify its functionality and that it is licensed properly.
 - a. If you are in need of a trial license of Autocad, please visit Autodesk's website.
- 2. **Intel Fortran Compiler**: Verify a compatible Intel Visual Fortran (IVF) compiler has been installed which meets CRTech's <u>System Requirements</u>.

- a. If the compiler has not been installed, please install the latest version of **Intel**Fortran Compiler Classic for Windows. Here is a link to the Fortran Compiler

 installation instructions for use with CRTech software.
- 3. **SpaceClaim**: If you have purchased TD Direct, verify SpaceClaim is installed on the computer. Open it at least once to verify its functionality and that it is licensed properly.

Download Required Files

The user must be logged in the CRTech website to access the following links.

Customer downloads

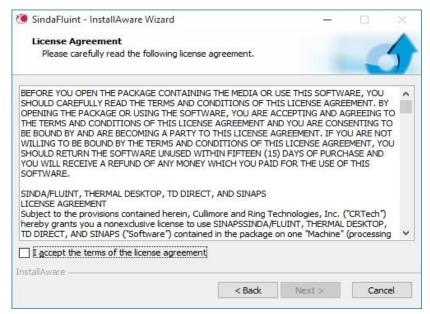
- 1. SINDA/FLUINT Installer Available from our Product Download page
- 2. Thermal Desktop Installer Available from our Product Download page

Student and Trial downloads

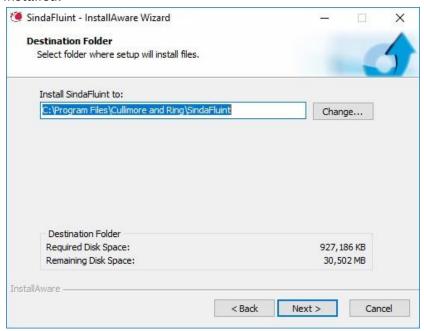
- 1. SINDA/FLUINT Installer Available from our Trial Download page
- 2. Thermal Desktop Installer Available from our Trial Download page

Install SINDA/FLUINT

- 1. Close any other applications you may have running. Shortly after the SINDA/FLUINT installer starts, it may require a reboot. If this happens, the installer should automatically restart after the computer reboots.
- 2. Double-click on the SINDA/FLUINT installer to begin installation: SindaFluint63N_64.exe
- 3. Review the license agreement. Check the box to accept the agreement and then click "Next."



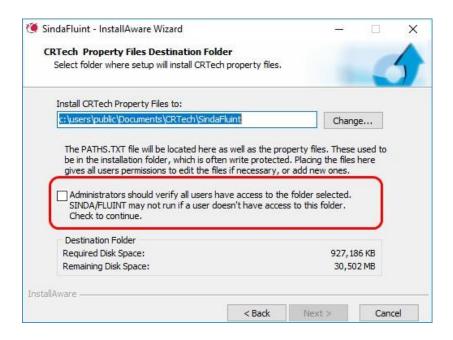
4. The program will prompt you to define the location where SINDA/FLUINT is to be installed.



5. The next screen defines where the fluid property files are to be installed. By default, these files are placed in the following folder, making it accessible to all users.

Users\Public\Public Documents\CRTech\SindaFluint

If a different folder is selected during the install, verify it is accessible by all users. Note, this location is stored in the registry, so files should not be moved to a different location after the installation.



6. Continue through the install prompts. When the installer is done, click Finish.

Install Thermal Desktop

- 1. Close any other applications you may have running.
- 2. Double click on the Thermal Desktop installer: ThermalDesktop_CRTechCAD_63.exe
- 3. Review the license agreement. Check the box next to "I Accept" and then click "Next".
- 4. Similar to the SINDA/FLUINT installation, the program will prompt you for directories and paths. The default location for installing property files is:

C:\Users\Public\Public Documents\CRTech\ThermalDesktop

If a different folder is selected during the install, verify it is accessible by all users.

- 5. The next screen defines a name for program shortcuts generated to Thermal Desktop. Confirm your choice, then click Next.
- 6. When the installer is done, click Finish.

Install CRTech Licenses

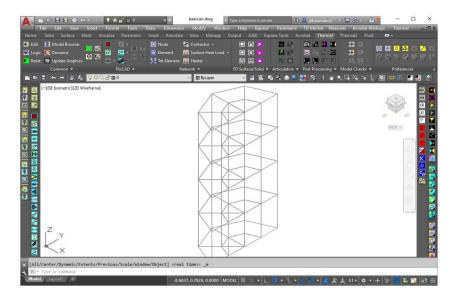
If you've already received license files from CRTech, please see the <u>License Install</u> <u>Instructions</u> to install CRTech licenses.

If you have not yet received license files, please generate a License Report (*.txt file) via License Manager and email the saved report file to crtech.support@ansys.com:

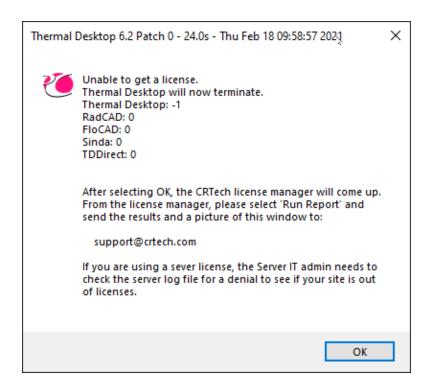
Start ▶ Programs ▶ SindaFluint ▶ License Manager ▶ Run Report

Verify Thermal Desktop Installation and Licensing

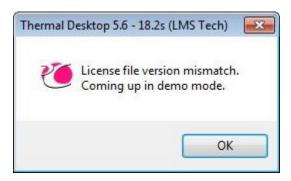
- 1. Open Windows Explorer and browse to location of the Thermal Desktop install test files (default is C:\Users\Public\Public Documents\CRTech\ThermalDesktop).
- 2. Right click on the file beercan.dwg and select "Open With", then select "More apps ↓ ". Scroll down and click "Look for another app on this PC". Browse to:
 - C:\Program Files\Cullimore and Ring\Thermal Desktop\TdDwgLauncher
 - Check the box next to "Always use this app to open .dwg files" and click OK.
- 3. The test model should open in AutoCAD and will appear similar to the graphic below. Depending on your exact version of AutoCAD and Thermal Desktop, the ribbons and toolbars may vary. If you see the half cylinder, continue to the next step.



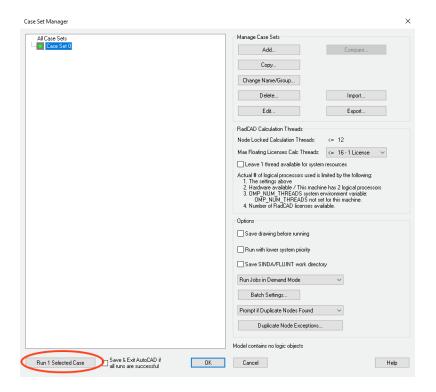
- 4. If you do not see any error messages, skip to step 8.
- 5. If you see the error message indicating "Unable to get a license", similar to the graphic shown below, you may not have installed the license properly or you have not installed the USB key for a dongle-based license. Look in the Cullimore and Ring installation directory C:\Program Files\Cullimore and Ring\Shared64\) and verify there is a license (*.lic) file, typically called CRFlex2.lic.



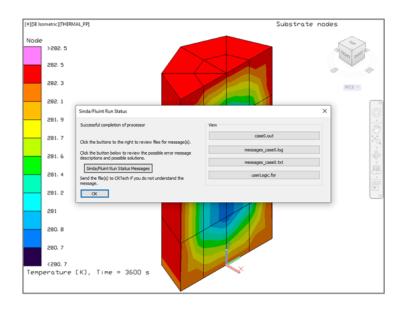
6. If you get an error window as shown below, your license file does not match the installed version of Thermal Desktop.



- 7. If you need new licenses, please see the <u>License Install Instructions</u> and follow the steps to Request Licenses. If you see a different error, or cannot resolve the issue, follow the steps in the License Install Instructions to Run a License Report.
- 8. If the model file opened, click on the green circle icon (Thermal > Case Set Manager) to open the Case Set Manager dialog shown below.
 Click on "Case Set 0" in the left panel (it should already be highlighted), then click on the Run 1 Selected Case button in the lower left corner of the window.



9. After you click the Run button, a SINDA/FLUINT Processor Status window will appear on the screen followed by the message box (shown below) stating "Successful completion of processor." If you see this window, Thermal Desktop and SINDA/FLUINT are installed and working properly.



10. If you get an error message, please run a License Report as outlined in the <u>License Install</u> <u>Instructions.</u>

Supporting Materials

View our online **Getting Started Guide** for additional learning resources.