Install Instructions for SINDA/FLUINT and Thermal Desktop

This installation process will install SINDA/FLUINT and Thermal Desktop, which includes RadCAD, Flo-CAD, and TD Direct. These modules are 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 access.

3. Prior to installing, turn off *User Account Control* through the Windows *Control Panel* and restart the computer.

4. If installing on Windows 8 or newer, enable *Microsoft .NET version 3.5*

    a. Open the Windows Control Panel

    b. Go to Programs and Features

    c. Click *Turn Windows features on or off*

    d. Check *Microsoft .NET Framework 3.5*

    e. Click *Ok*

5. Check to see if short names is enabled on the computer

    a. Open a command prompt as administrator

    b. In the command prompt window, type fsutil 8dot3name query c:

    c. If short names are enabled, it should return a value of "0 (8dot3 name creating is enabled)".

    d. If the value returns as non-zero, enable short files names. Here is a link to instructions: https://technet.microsoft.com/en-us/library/ff633453(v=ws.10).aspx

6. Verify **Autocad** has been installed on the computer. Open it at least once to verify its functionality and that it is licensed properly.

7. Verify an **Intel Visual Fortran** (IVF) compiler has been installed which meets the System Requirements. If it has not been installed, here is a link to the install instructions for Parallel Studio XE 2017.

8. 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.
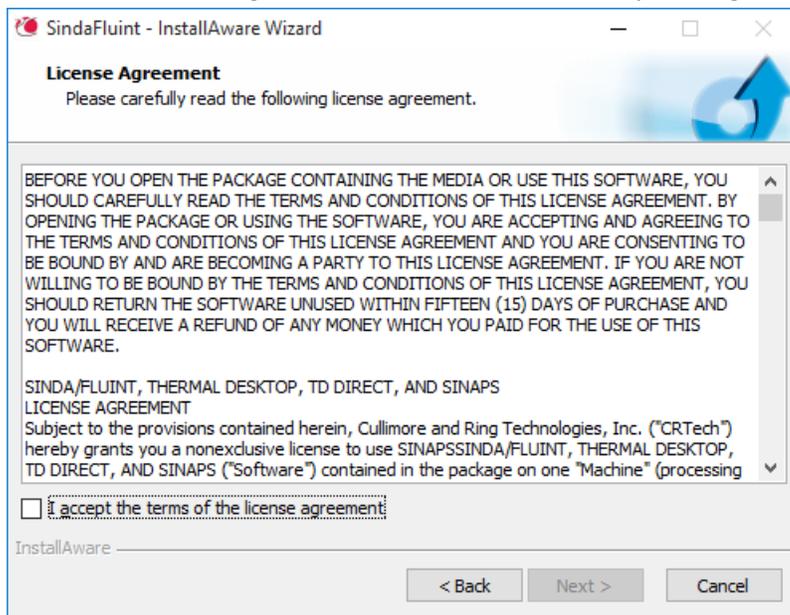
Download Required Files

1. SINDA/FLUINT Installer – Available from our Product Download page. The user must be logged in the CRTech website to access this page.

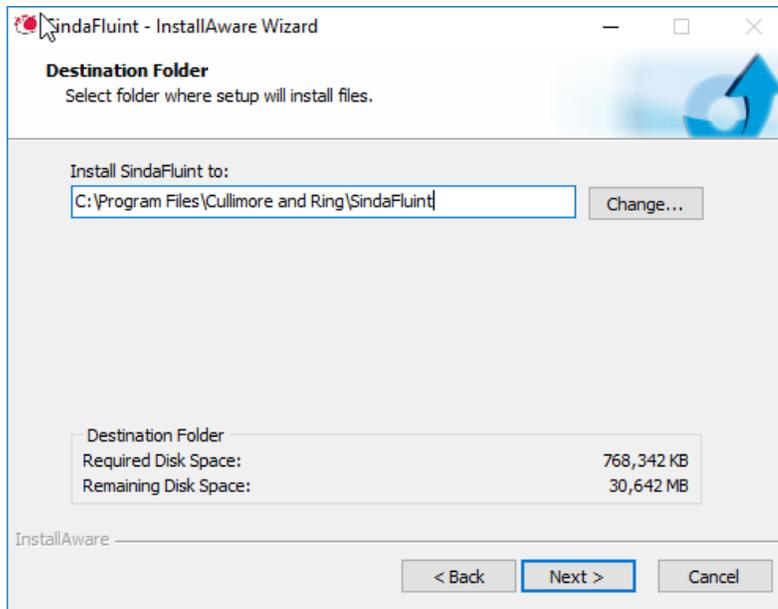2. Thermal Desktop Installer – Available from our Product Download page

Install SINDA/FLUINT

1. Close any other applications you may have running

2. Double-click on the SINDA/FLUINT installer: SindaFluint[version number]N_64.exe

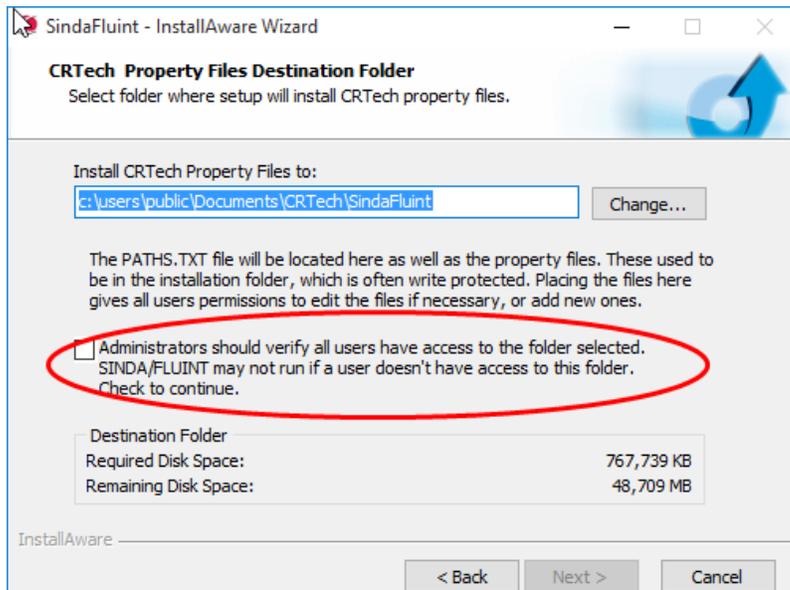3. Review the license agreement. Check the box to accept the agreement and then click "Next.

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. (Versions prior to 6.0 do not have this feature.) By default these files are place in the Public\Documents folder making it avilable to all users. If a different folder is selected during the install, verify it is accessible by all users.

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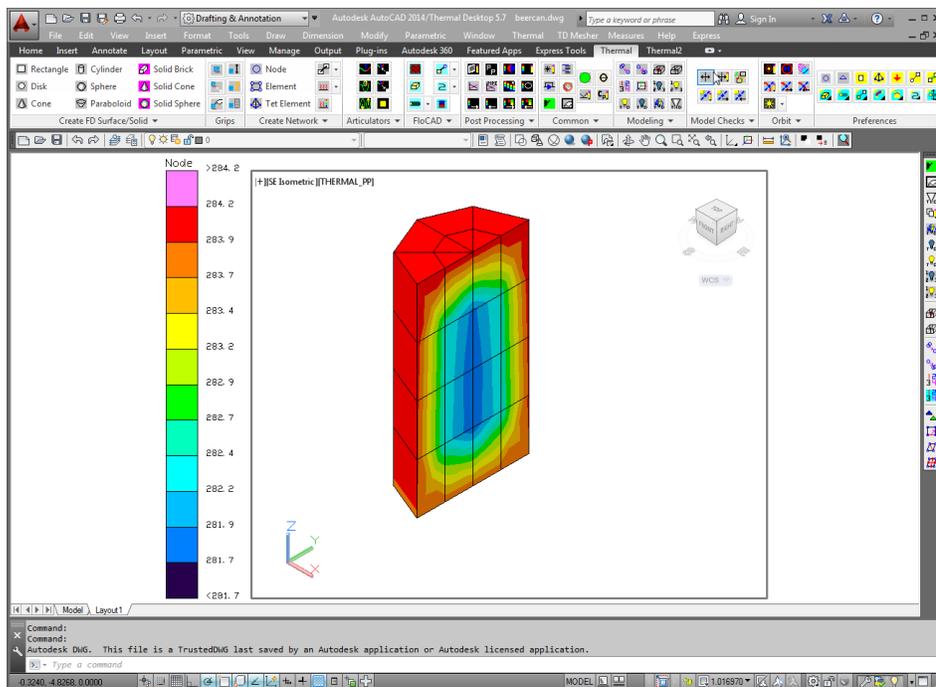
Install Thermal Desktop

1. Close any other applications you may have running

2. Double click on the Thermal Desktop installer: ThermalDesktopAcad[version number]_64.exe

3. The program will prompt you for directories and paths

4. When the installer is done, click Finish

Install CRTech License

1. See License Install Instructions to install CRTech licenses

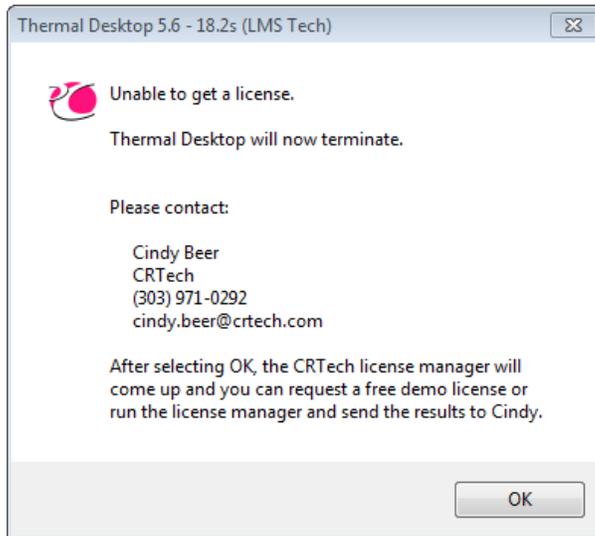## Verify Thermal Desktop Installation and Licensing

1. Copy the *Tutorials* folder from the Thermal Desktop installation folder to the desktop. This is typically found at *C:\Program Files\Cullimore and Ring\Thermal Desktop\Tutorials*

2. From the new *Tutorials* folder, go to *\Thermal Desktop\beercan\completed*

3. Double click on the file *beercan.dwg*. This model should appear in AutoCAD as shown below. Depending on your exact version of AutoCAD and Thermal Desktop, the ribbons and toolbars may vary. If the half cylinder appears correctly, continue to the next step.
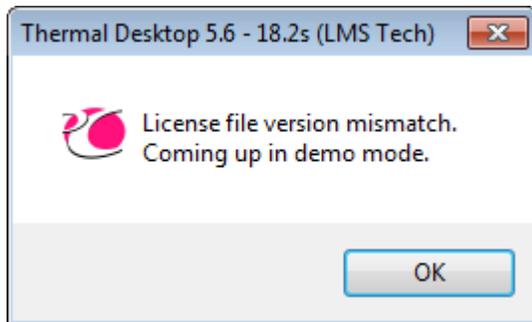

If you see the error message indicating <u>Unable to get a license</u> as shown below, you may not have installed the license properly or you have not installed the USB key for a stand-alone li-

cense. Look in the Thermal Desktop installation directory (C:\Program Files\Cullimore and Ring\Thermal Desktop\) and verify there is a files called radcad.lic.
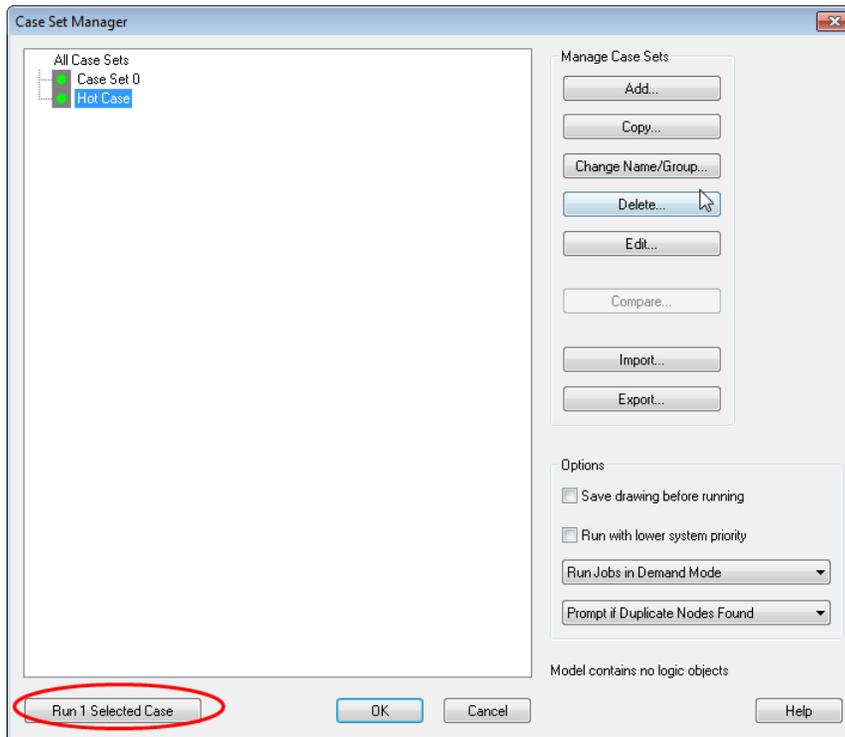

If you get an error window as shown below, your license file does not match the installed version of Thermal Desktop.

If you need new licenses, please see the License Install Instructions 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.

4. If the model file opened, click on the green circle icon (Thermal > Case Set Manager) to open the Case Set Manager shown below. Click on Hot Case in the left panel (it should turn blue when highlighted), then click on the Run 1 Selected Case button in the lower left corner of the window.
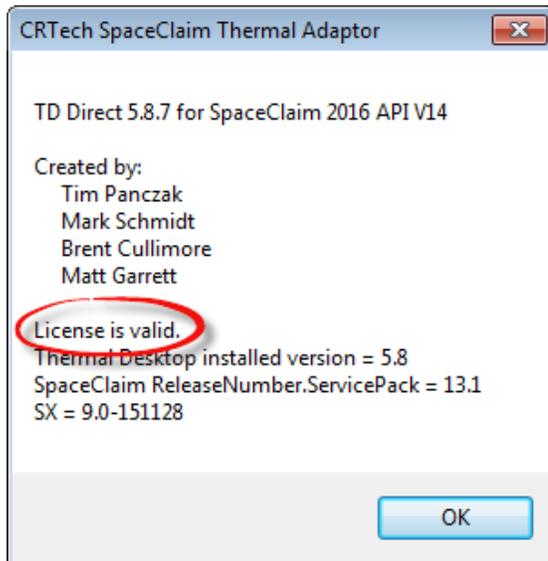
After click the Run button, a SINDA/FLUINT Processor Status window will appear on the screen followed by the message box shown below stating "**Successful completion of processor**." If you see this window, Thermal Desktop and SINDA/FLUINT are installed and working properly.

If you get an error message, please run a License Report as outlined in the License Install Instructions.

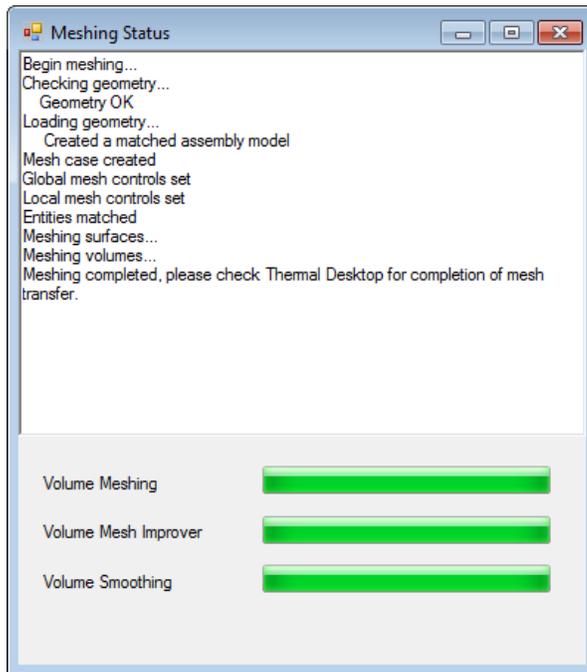## Verify TD Direct (skip if you do not have TD Direct license)

1. Open SpaceClaim

2. Go to the Thermal panel on the ribbon and select About

3. A window similar to one shown below should open. Verify the license is valid. If the license is not valid, go the License Installation Instructions and follow the steps to *Run a License Report*. If the license is valid, continue to the next step.

4. If you have not already done so, copy the *Tutorials* folder from the Thermal Desktop installation folder to the desktop. This is typically found at *C:\Program Files\Cullimore and Ring\Thermal Desktop\Tutorials*

5. From the *Tutorials* folder, go to *\Thermal Desktop\TD Direct\Fin_Diode\5_Complete*

6. Double click on the file *heatsink5.scdoc* and the file *HeatSink_5.dwg*. The former will open in SpaceClaim, and the latter in AutoCAD.

7. In Thermal Desktop, select *Thermal > TD Direct > Synchronize All Links.*

8. This will update the thermal mesh and verify that Thermal Desktop and TD Direct are communicating. A Meshing Status window will open and if it shows the mesh completed and transferred as below, TD Direct is working correctly.

Supporting Materials

View our online Getting Started Guide for additional learning resources.