FASTLite Error Messages

In some (hopefully rare) cases, a simulation will fail to complete and return an error message to the user in a red message window. The message will contain an error number which provides a reference to additional information from the table below. Most often, these errors result from improper editing of the input data files outside of the FASTLite software. The FASTLite software is designed to provide limits for the inputs so that improper values do not wind up in a stored data file.

Error Number	Error(s) Causing This Message	Possible Fixes
1	Wrong CFAST fire type	*The data file for the chosen scenario defines the fire type by number. In the FASTLite input file, this number is identified on the line beginning with LFBT. This number must be 0, 1, or 2.*  Select a new fire type from the main fire specification window and save the data file to disk.
4	No data file selected	*The CFAST fire model was executed without an associated data file. This message should not occur in FASTLite.* Select *File* and then *Open* or *New* to define a data file for the chosen scenario.
21	Failure of target initialization	*Within the CFAST fire model, heat flux to the floor is calculated by defining a position on the floor called a target. An internal error has occurred in the definition of the target. This message should not occur in FASTLite*
22	Error initializing graphics descriptor	*The selected input file contains errors in the description of graphical output beginning with the DEVICE line in the input file. This message should not occur in FASTLite.* Use a text editor to remove all lines from the line beginning with DEVICE to the end of the file. The graphics information will be recreated the next time the file is saved within FASTLite.

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24 25	Invalid detector specification	*There is a syntax error in the input file describing one of the detectors included in the scenario.*  Delete defined detectors and add new detectors to replace the deleted detectors.
36	Thermophysical properties file does not exist.	*The file THERMAL.DF has been deleted from the FASTLite subdirectory.* Reinstall the FASTLite software from the CD-ROM to recover the file.
37	Improper definition of thermophysical properties	*One of the files THERMAL.DF or THERMAL.NDX has been corrupted and contains invalid information defining thermal properties of materials.* Reinstall the FASTLite software from the CD-ROM to recover the files.
38	Too many time points in fire definition	*The defined fire curve has too many times points. A maximum of 21 points can be defined.*  Define a new fire curve to replace the existing fire curve in the selected data file.
43	Detector is placed in a non-existent compartment	*The detector is placed in a compartment which no longer exists in the scenario – for example, a detector is placed in compartment 3 and the compartment 3 is deleted from the scenario.*  Delete defined detectors and add new detectors to replace the deleted detectors.
44	RTI value for a detector is invalid	*The RTI value for a detector is outside the range of 1 to 400 $m^{1/2}s^{1/2}$*  Correct RTI value

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45	Location of detector is outside physical dimensions of compartment	*The specified location for a detector is outside the defined dimensions for a compartment.*  Delete defined detectors and add new detectors to replace the deleted detectors.
46	Invalid detector type	*Detectors may be either smoke detectors or heat detectors. The fire model has read in a definition for a detector which is neither.*  Delete defined detectors and add new detectors to replace the deleted detectors.
-11	DASSL error	*An error has occurred in the solution of the differential equation set in the fire model. The differential equation solver in CFAST, DASSL, has returned an error message after failing to converge to a solution within acceptable error tolerances. There are many causes for this error.* Most often, changing the sizes of ventilation openings to the outside allows the simulation to proceed. Providing sufficiently large openings for the first few seconds of a simulation allows the differential equation solver to proceed without effecting the ultimate outcome of the fire. Once the model has initialized to appropriate values, the vents can be closed and the simulation allowed to proceed. Defining an extremely large fire in a small compartment with limited ventilation can cause the differential equation solver to fail. Usually the fire size is orders of magnitude larger than can be supported with available oxygen. Reduce the fire size to allow the simulation to proceed.