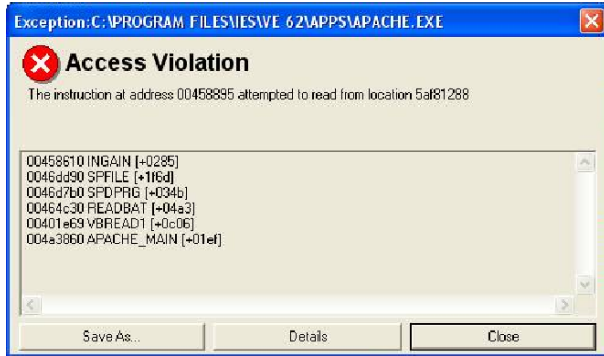


Access Violation (Display Lighting)

When attempting to run a VE Compliance DSM simulation we experience an Access Violation crash and can proceed no further.

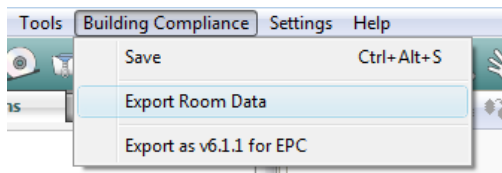


The reason for this is that there is an invalid setting in the display lighting gain of a, or some, room(s).

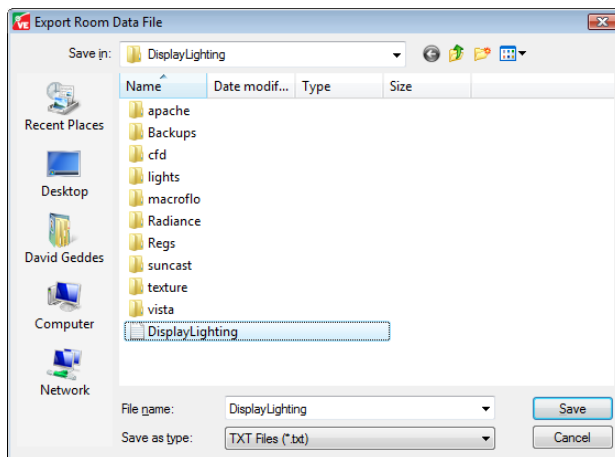
To resolve the problem consider the example here where we have a simple model set up to show the problem and solution.

To track down which rooms are effected we can follow this procedure:

- 1) Select Export Room Data from the Building Compliance menu

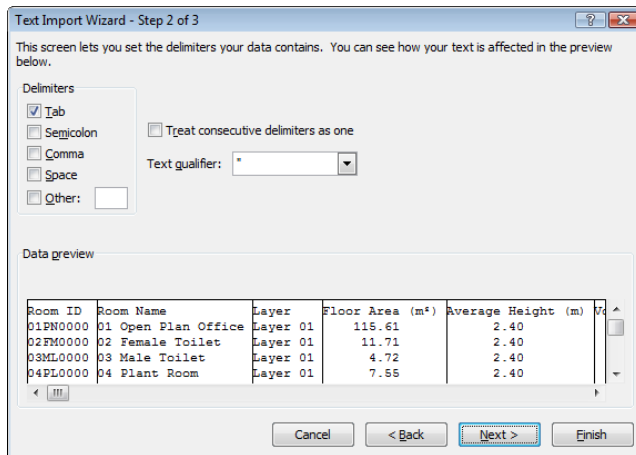


- 2) Save the file



- 3) Open your favourite spreadsheet package, here I'll use Microsoft Excel

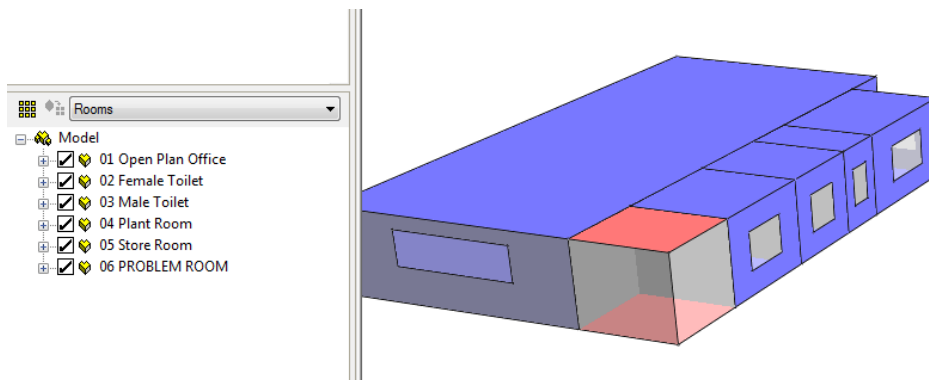
- Open the txt file you have just exported and using the Text Import Wizard select Tab as the column delimiter.



- Sort the data by the Fluorescent Sensible Gain of the 2nd Lighting gain.
- Highlight any 1.#j (or any other invalid setting) figures

Room ID	Room Name	Fluorescent Profile	Dimming profile	Fluorescent Sensible Gain (W)	Fluorescent Sensible Gain (W/m²)	Fluorescent Power Consumption (W)	Fluorescent Power Consumption (W/m²)	Fluorescent Profile	Dimmi
01PN0000	01 Open Plan Office	NCM D1Edu_Circulation_Light[BRE estimates]	on continuously	-	-	-	-	-	-
02FM0000	02 Female Toilet	NCM D1Edu_Toilet_Light[BRE estimates]	on continuously	-	-	-	-	-	-
03ML0000	03 Male Toilet	NCM D1Edu_Toilet_Light[BRE estimates]	on continuously	-	-	-	-	-	-
04PL0000	04 Plant Room	NCM D1Edu_Celloff_Light[BRE estimates]	on continuously	-	-	-	-	-	-
05ST0000	05 Store Room	NCM D1Edu_Celloff_Light[BRE estimates]	on continuously	-	-	-	-	-	-
06PR0000	06 PROBLEM ROOM	NCM D1Edu_Reception_Light[BRE estimates]	on continuously	1.#j	1.#j	1.#j	1.#j	NCM D1Edu_Reception	on cont

- Back in the VE now we can identify the problem rooms. For multiple rooms I would use a room grouping scheme to allow me to easily select all these spaces without having to find them in the main rooms list each time. In this simple example I have only 1 room which is this one here:



- 8) For each room with the problem we need to select the room and use the room query. If we look at the Internal gains tab we can see the offending parameters when we select the second lighting gain (display lighting).

Type	Reference
People	NCM D1Edu_Reception Occ
Fluorescent Lighting	NCM D1Edu_Reception Lit
Miscellaneous	NCM D1Edu_Reception Fop
Fluorescent Lighting	NCM D1Edu_Reception LtD

Type: Fluorescent Lighting
 Reference: NCM D1Edu_Reception LtD
 Input mode: Display lighting

Maximum Sensible Gain: 1.00 W/m² 1.00 W

Maximum Power Consumption: 1.00 W/m² 1.00 W
 Radiant Fraction: 0.45
 Fuel: Electricity

- 9) To resolve this we need to move to the Building Regs tab and click on the NCM lighting data button then simply click OK on the pop-up window and again on the main Room Data window.

Room Data

General Building Regs Room Conditions System Internal Gains Air Exchange

Generally:

Include room in Building Regulations analysis?

Type of room: Heated or occupied room Template

NCM building area type: D1: Primary or Secondary school (Primary) Template

NCM activity: NCM D1Edu: Reception Template

For shell and core building, room is part of core area?
 High pressure drop air treatment Template

NCM Lighting:

NCM lighting data

SBEM design options:

Full design carried out: Total Wattage: 10.000 W/m²
 Design illuminance, lux: 50.00

Lighting chosen but not calculated: Lumens / circuit Watt: 0.00
 Light output ratio: 0.25

Only lamp type known

Parasitic power: Default
 0.30 W/m²

Occupancy sensing: MAN-ON-OFF+EXT (Foc = 0.95)
 Parasitic power: Default
 0.30 W/m²

OK Cancel

10) Once this is done if we query the space again we can see that the display lighting figures have been updated with valid figures.

Type	Reference
T People	NCM D1Edu_Reception Occ
T Fluorescent Lighting	NCM D1Edu_Reception Lit
T Miscellaneous	NCM D1Edu_Reception Eqp
T Fluorescent Lighting	NCM D1Edu_Reception LitD

Type:	<input type="text" value="Fluorescent Lighting"/>
Reference:	<input type="text" value="NCM D1Edu_Reception LitD"/>
Input mode:	<input type="text" value="Display lighting"/>
Maximum Sensible Gain:	<input type="text" value="9.000"/> W/m ² <input type="text" value="66.92"/> W
Maximum Power Consumption:	<input type="text" value="9.000"/> W/m ² <input type="text" value="66.92"/> W
Radiant Fraction:	<input type="text" value="0.45"/>
Fuel:	<input type="text" value="Electricity"/>

If the procedure above is followed for all effected spaces then the crash will no longer occur.