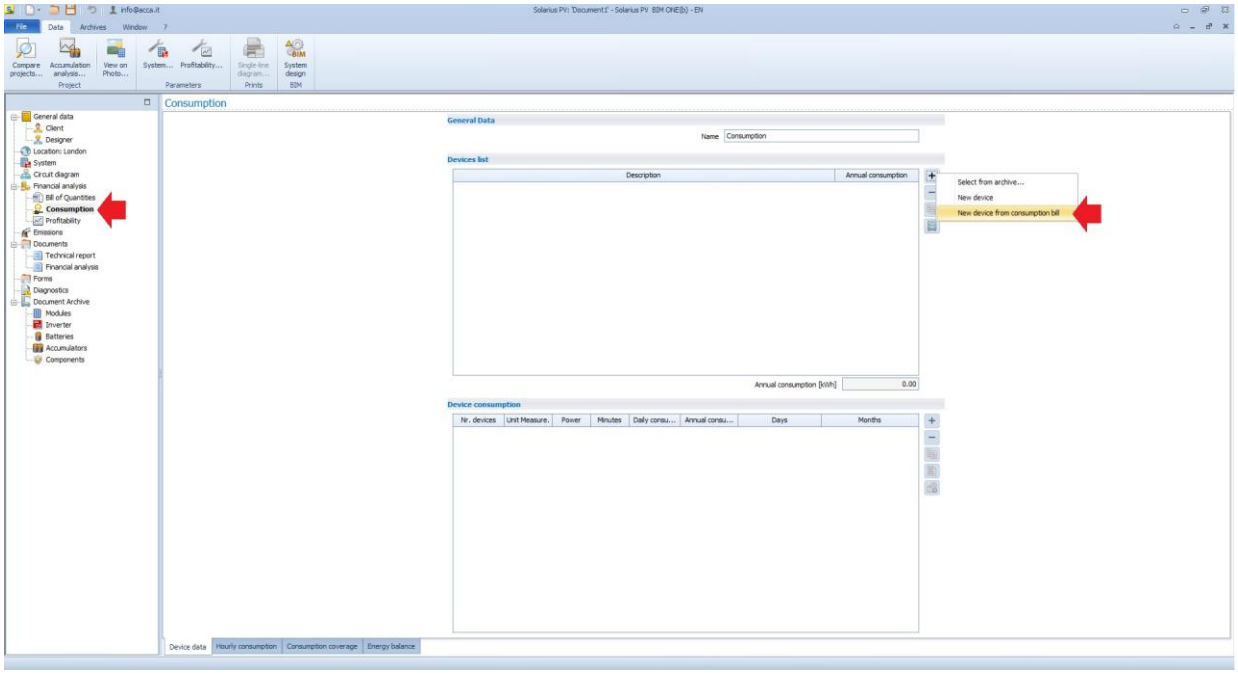
CONSUMPTION FROM DATA BY BAND

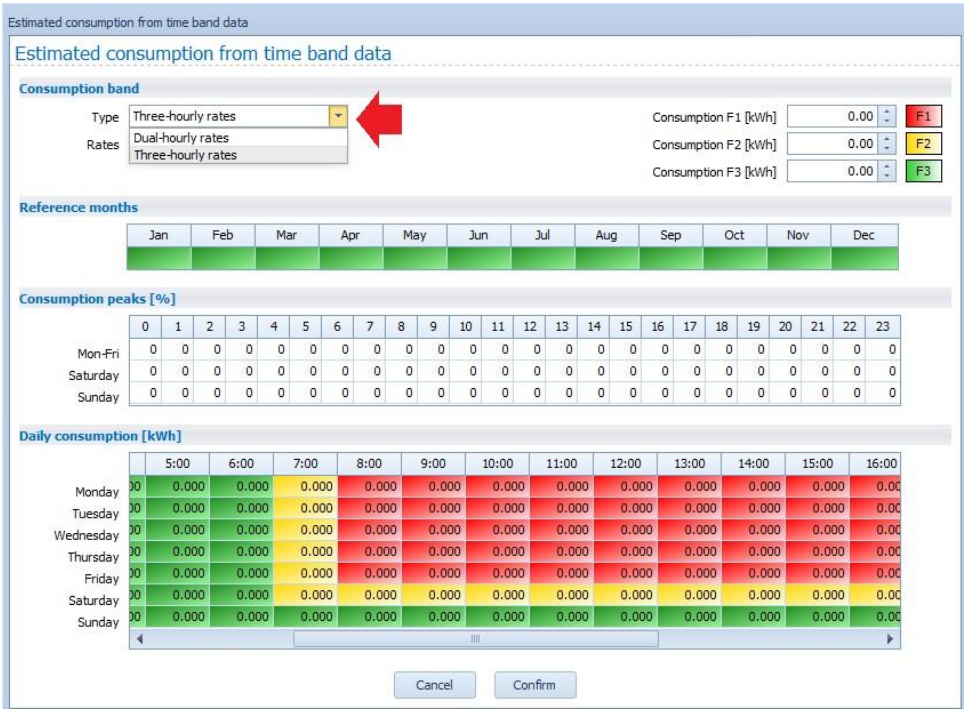
Energy consumption, according to time bands, is managed in the program's "consumption" section.

Let's add a device that identifies the reference period (either monthly, quarterly, yearly, etc.) using the "New device from energy consumption bill..."

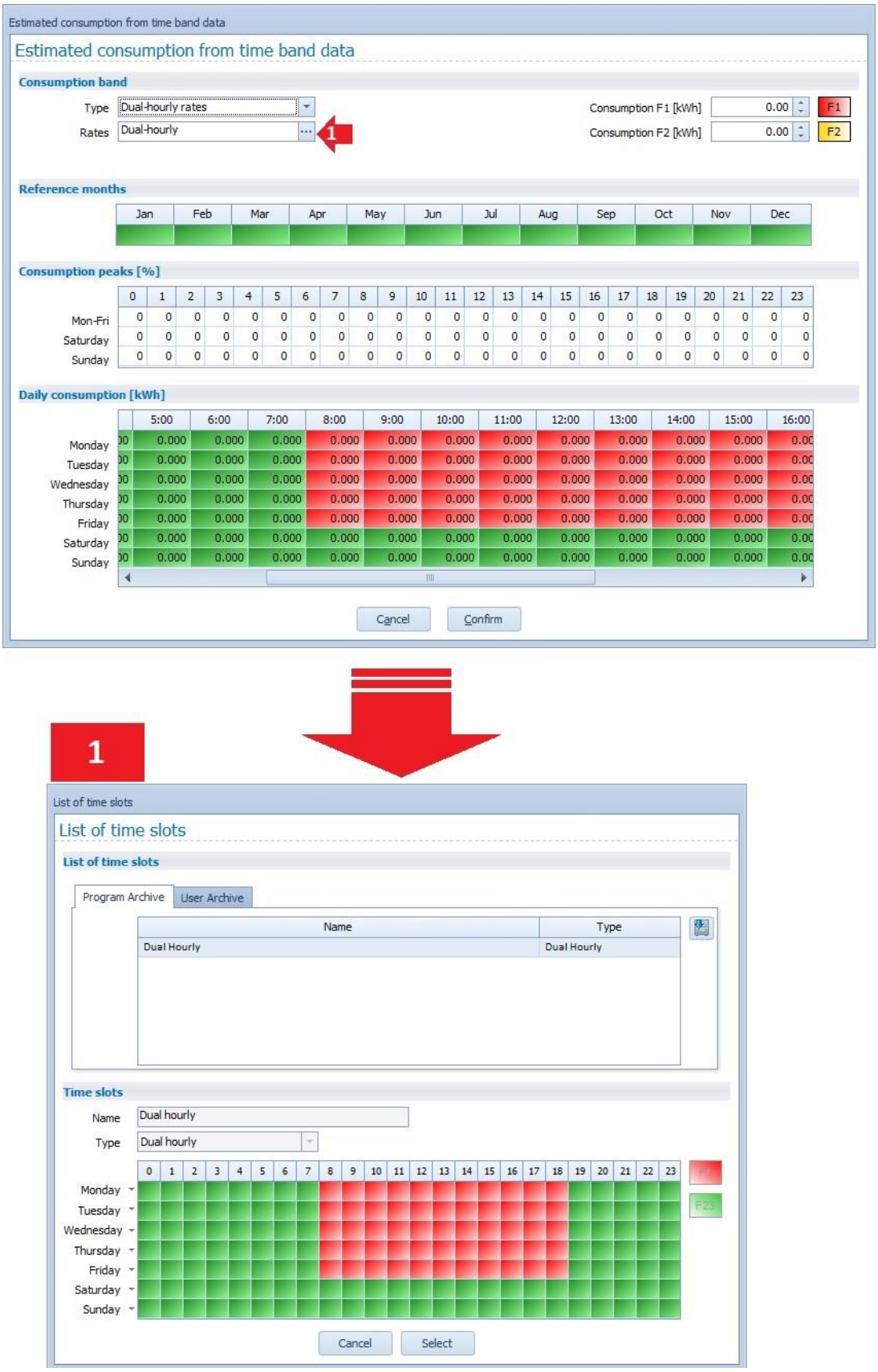


Where, in the window "Estimated consumption by data per band" you can choose:

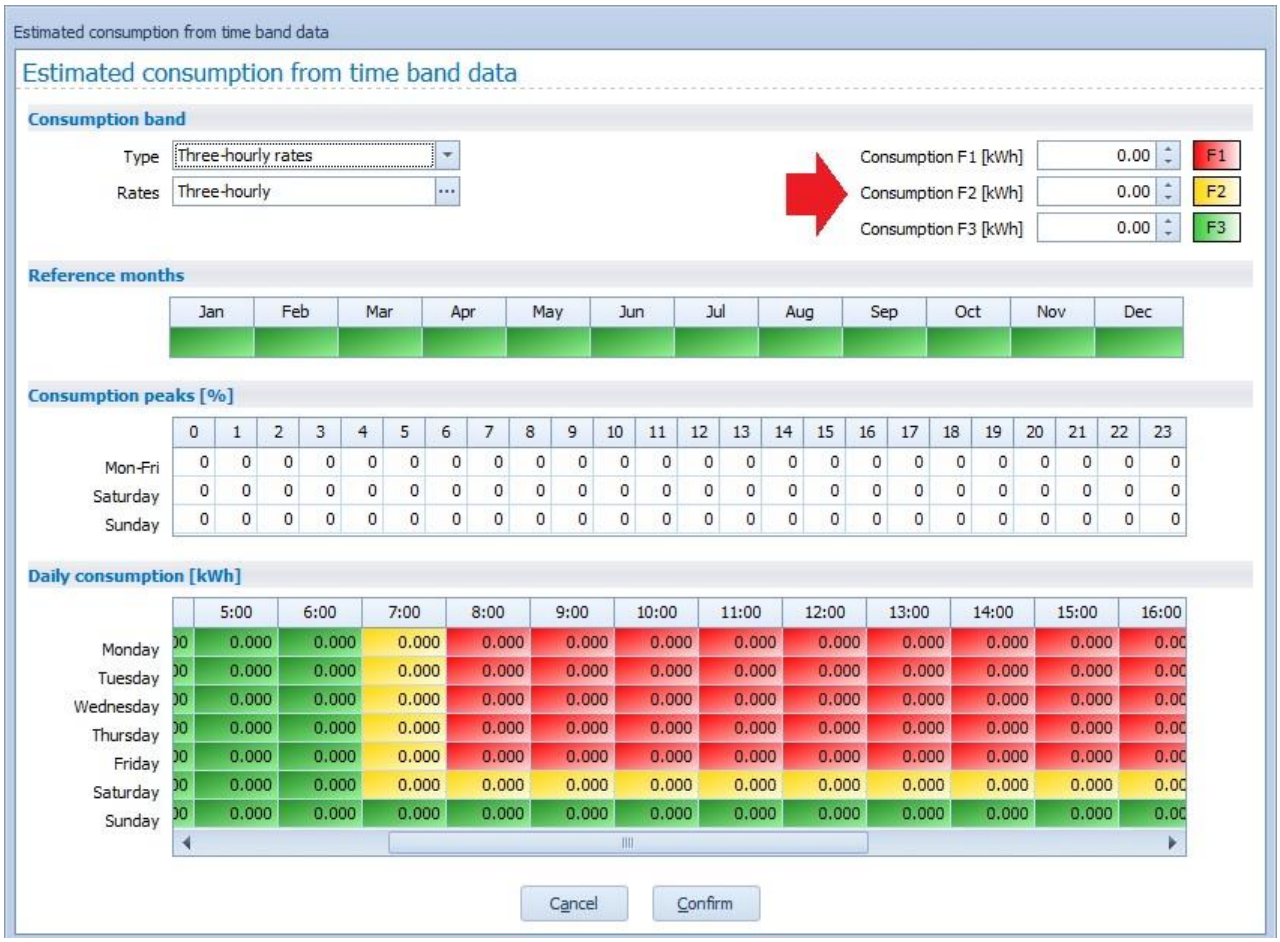
1. The type of band, whether three-hourly or Two-hourly



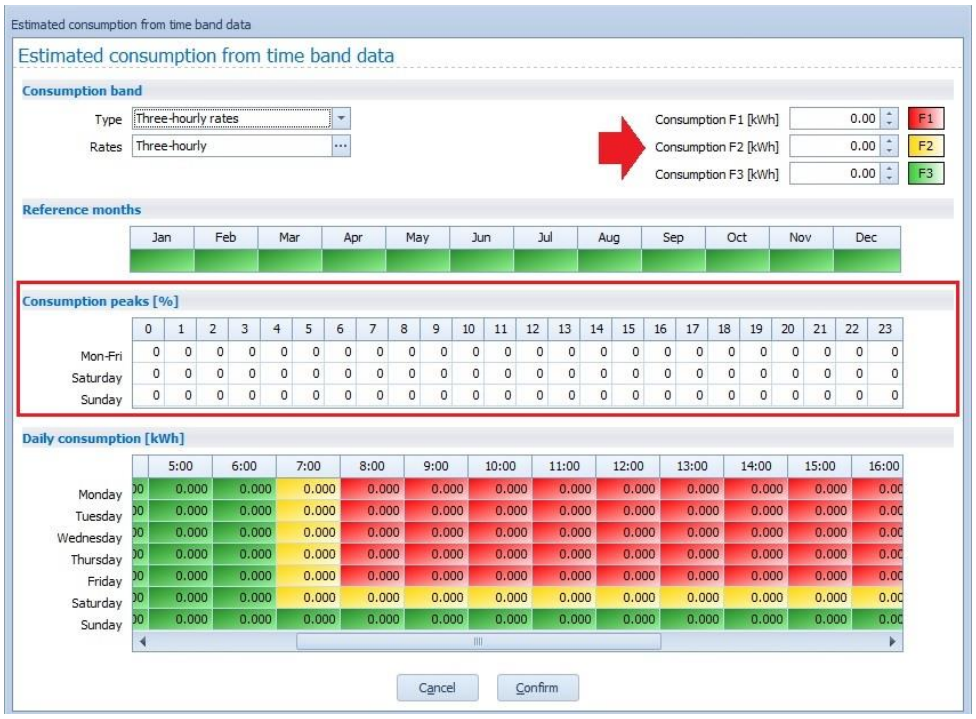
2. View the time schedule specifications in the "User Archive" and the "Program" Archives.



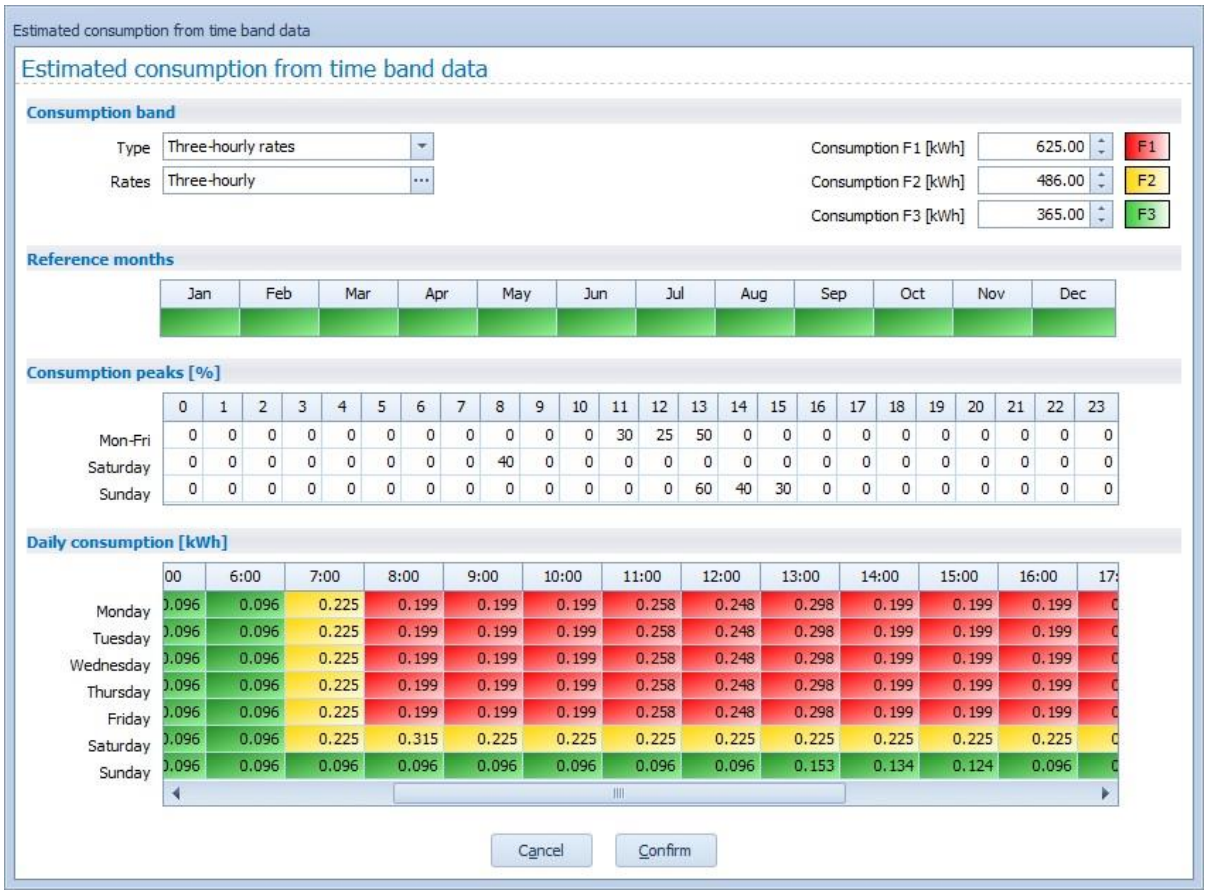
3. Insert the consumptions for three types of time slots: F1, F2 and F3



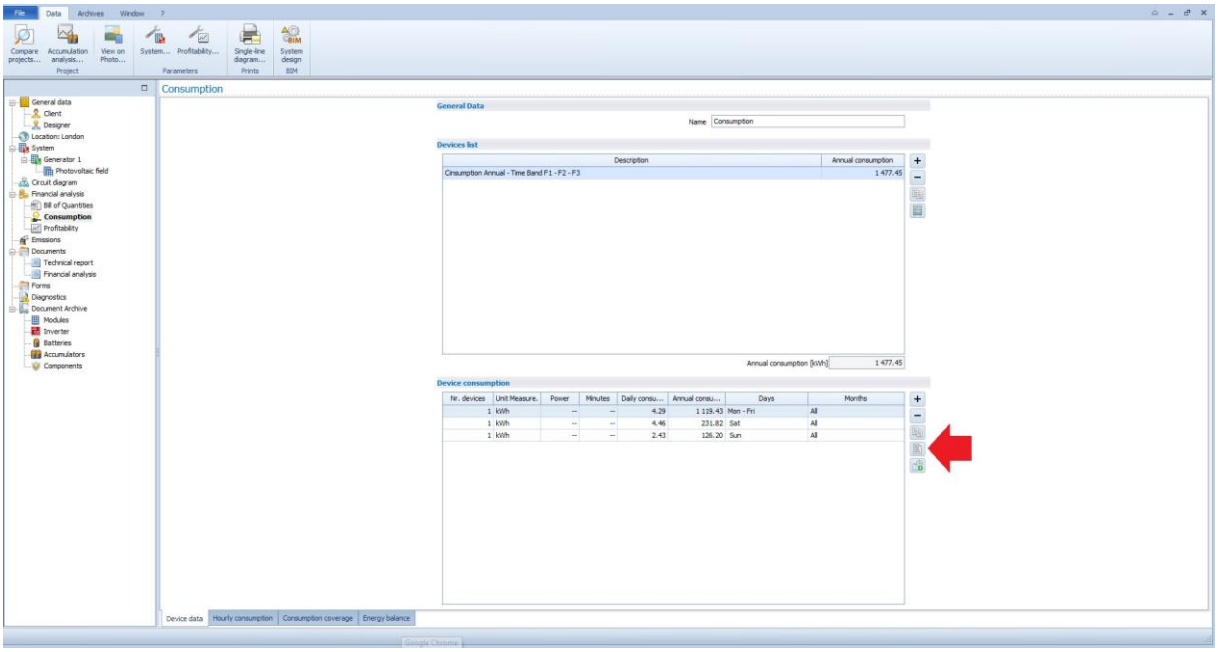
4. Define the "consumption peaks" during the 24 hours and the various days of the week.

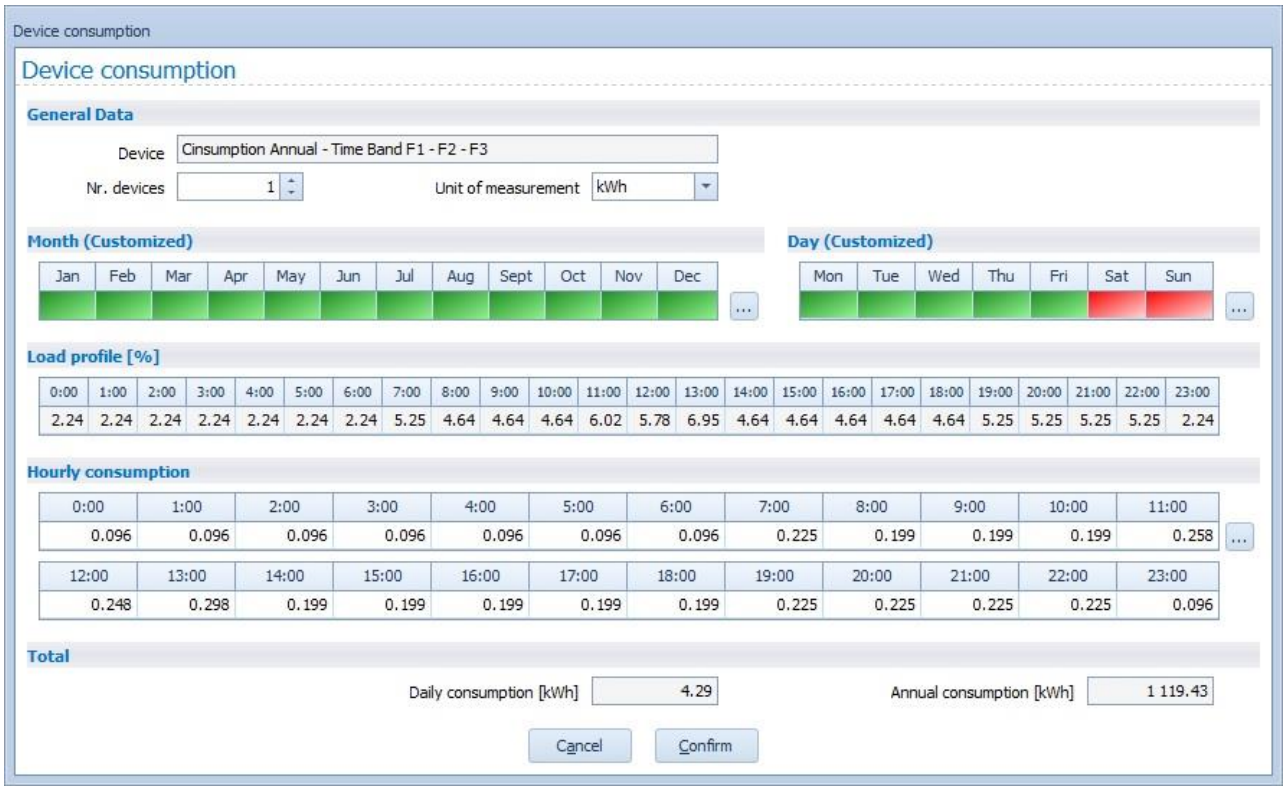


5. Obtain the "Daily consumption" hours for the various days of the week, divided by the considered time bands.



6. Finally, in the "Consumption" node, you'll get a summary of the "device" consumptions with reference to the daily, annual consumption and the possibility of viewing the "device "details.




Device consumption
Device consumption
General Data
Device
Cinsumption Annual - Time Band F1 - F2 - F3
Nr. devices
1
Unit of measurement
kWh
Month (Customized)
Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec
Day (Customized)
Mon Tue Wed Thu Fri Sat Sun
Load profile [%]
0:00 1:00 2:00 3:00 4:00 5:00 6:00 7:00 8:00 9:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
2.24 2.24 2.24 2.24 2.24 2.24 2.24 5.25 4.64 4.64 4.64 6.02 5.78 6.95 4.64 4.64 4.64 4.64 4.64 5.25 5.25 5.25 5.25 2.24
Hourly consumption
0:00 1:00 2:00 3:00 4:00 5:00 6:00 7:00 8:00 9:00 10:00 11:00
0.096 0.096 0.096 0.096 0.096 0.096 0.096 0.225 0.199 0.199 0.199 0.258
12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
0.248 0.298 0.199 0.199 0.199 0.199 0.199 0.225 0.225 0.225 0.225 0.096
Total
Daily consumption [kWh]
4.29
Annual consumption [kWh]
1 119.43
Cancel
Confirm

Example (Consumption by monthly range)

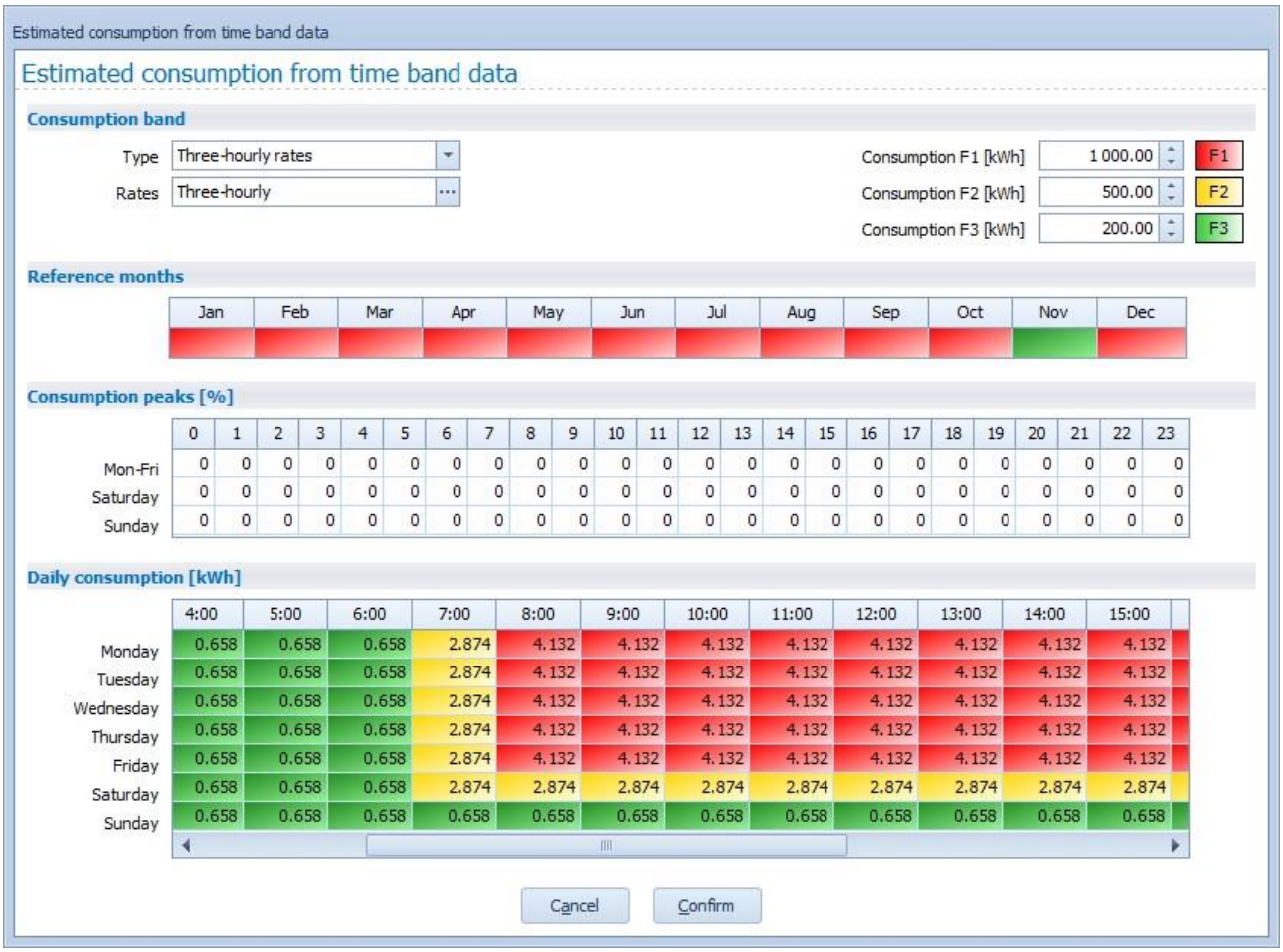
The example below show's a description of how to define a consumption by time-band relating to a single month. It shows the result of "Daily consumptions" in detail highlighting any consumption peaks if present. The operating procedures are as follows:

A) DAILY CONSUMPTION IN ABSENCE OF CONSUMPTION PEAKS

a) A new device is added using the "New device from enrgy consumption bill" feature.

b) Consumption by types F1 = 1000, F2 = 500, F3 = 200 are shown

c) Only the month to be considered is activated, for example "November" (in this case November is highlighted in green, all others are in red)



d) Once completed the previous operations, as a result we obtain the carta s shown in the previous image, where for example, in Band F1, the value of 4,132 kWh is obtained according to the calculation illustrated below:

The calculation parameters used are:

- No. 52 weeks in a year
- N. 5 working days (Monday - Friday) in a week
- N. 2 holidays (Saturday and Sunday) in a week

- Calculation of hourly consumption levels considering F1 range → (1000 kWh/22 days) = 45.45 kWh/day, where 22 represents the weekdays for the month of November (*)
- Calculation of hourly consumption levels considering F1 range → (45.45 KWh/11) = 4.13 kWh, where 11 represents the hours used in the F1 band

...in the same manner we can get the daily values for time bands F2 and F3.

B) DAILY CONSUMPTION WITH THE PRESENCE OF CONSUMPTION PEAKS

The presence of daily consumption peaks are entered manually with a value ranging from 0 to 100%.

For example, we can define a consumption peak at 12:00 on all weekdays, equal to 50% (see box in the image below).

All this will lead to a breakdown of consumptions. For example, we can get 3,593 kWh for time slots not affected by the peak consumption and a value of 5,929 kWh per peak at noon and calculated as follows:

Time of peak consumption calculation range F1 at **12:00pm → (3.953 * 1.5 = 5,929 kWh)** ie the hourly consumption, with the presence of the peak, increased by 50% more.

(*) the reference year considered in the calculation is 2007.