

RES 1-1 Residential Envelope Transmittance Value (RETV):

RETV is the residential counterpart of OTTV and takes into consideration the three basic components of heat gain through the façade of a building. The thermal transmissions factors are modified to reflect the unique cooling requirements of residential buildings.

For the purpose of presenting the calculations to GreenRE, only external facades of the dwelling spaces (i.e living, dining, study and bedrooms) are to be considered. Portions of dwelling space external façade facing a corridor **AND** exposed to direct sunlight shall be included. External façade of kitchens and toilets are **NOT** included in the RETV calculation.

Appropriate solar correction factors specific to RETV are to be used as these differ from factors used for OTTV calculation.

$$RETV = 3.4(1 - WWR)U_w + 1.3(WWR)U_f + 58.6(WWR)(CF)(SC)$$

RES 1-2 Naturally Ventilated Design:

Option 2(i) - For credits pertaining to building layout design, whereby orientation of window openings is aligned to maximise prevailing wind direction (i.e N-S direction) only windows adjoining dwelling spaces and kitchens will be considered. Windows adjoining toilets/bathroom and store rooms will not be considered.

For high rise residential buildings, windows along double loaded corridors will not fulfill this criteria unless they are facing an airwell or void whereby unobstructed airflow can be reasonably expected.

Ventilation simulation is encouraged where the rule of thumb design principles do not lead to a satisfactory ventilation score to prove acceptable wind speed of 0.6m/s through dwelling spaces.

RES 1-8 Cool Hardscaped Area:

The area of application for % calculation of hardscape material SRI will be for the ground floor site area ONLY. This can be estimated by the following formula:

$$\text{Site Area} - \text{Plinth Area} - \text{Softscape Area} = \text{Hardscape Area}$$

RES 1-3 & NRB 1-5 Daylighting:

For daylighting credits, simulation or suitable daylight calculation is necessary for occupied and common areas to achieve the minimum daylight factors per MS-2680 and MS-1525. Window area % rule of thumb (UBBL) is not sufficient to prove adherence to these criteria.

For common areas, artificial lighting circuit schematics are necessary as documentary evidence to prove design that allows controllability to maximise harvested natural daylight.

Airconditioning System Design

Effective January 2020, GreenRE will adopt MS-1525:2019 for benchmarking air conditioning system efficiency for the purpose of building energy modelling.

GreenRE will also adopt the revised ST Ratings for domestic air conditioners per circular issued by Suruhanjaya Tenaga (ST) in May 2018. Excerpt of circular is as follows:

PRODUCTS	UPDATES	IMPLEMENTATION DATE
Air Conditioner	Added: ISO 16358-1	1 Jun, 2018
	Updated: EER (Energy Efficiency Rate) to CSPF (Cooling Seasonal Performance Factor)	
Refrigerator	Updated: MS IEC 62552:2011 to MS IEC 62552-3:2016	
Washing Machine	Added: Energy efficiency label requirement to MS IEC 60456:2012	1 Sept, 2018

Energy Efficiency Index (EEI)

Effective January 2020, the EEI calculation will be a **MANDATORY** requirement for building project submission to GreenRE. The requirement applies to both new and existing buildings for all target ratings. For residential buildings, the EEI calculation applies to common area only.

All GreenRE Managers (GREMs) and/or submitting professional are responsible to comply accordingly.

GREENRE NEWS

Restaurant (Annex to NRB, ENRB and INT Tools) v1.0

On 1st October 2019, GreenRE have launched a Restaurant Tool as an annexe to its existing Non-Residential (NRB), Existing Non-Residential Building (ENRB) and Interior (INT) Design Reference Guide. The GreenRE Restaurant rating system is targeted at standalone and/or building integrated restaurant operations. For further info kindly email us at info@greenre.org.

Congratulation SFI Foods Sdn Bhd!

GreenRE to congratulate SF Foods Sdn Bhd for being the first to have **TWO** industrial buildings certified under Existing Industrial Facilities (EIND). Both industrial building namely SFI Food Sdn Bhd (Phase 1) and SFI Food Sdn Bhd (Phase 2) has been awarded actual certificate with Silver rating.

GreenRE Managers (GREMs) Certification Renewal

Attention to All GreenRE Managers,

In order to maintain the high standards of professional competency, the validity period of the certified GreenRE Manager will be granted on a 2-yearly basis. You are required to renew the certification for every 2 years by following the requirements which are;

- i) To attend at least one GreenRE Refresher Course (GRERC) **OR** Basic Course in GreenRE Manager's Course (GREMC) – Certificate of Attendance to be attached with the renewal application.
- ii) To collect **10 CPD points per year** from any of these activities;
 - Courses organized by GreenRE / REHDA Youth / REHDA Institute **OR**
 - Any courses related to the green building industry (subject to be approved by the Management of GreenRE **OR**
 - Involve in GreenRE projects (Note: completion means that the Letter of Award, stating the GEM of the project, has already been awarded by GreenRE Sdn Bhd. It does not mean the physical completion of the project)

Kindly refer to the **CPD Guidelines** in our website, www.greenre.org