PRESS RELEASE

Windows that keep you warm

31 May 2017, Johannesburg: Fenestration is a fundamental element of architectural design – defining both outside appearance and interior atmosphere of a building. The percentage glazed surface area of the overall building envelope is an important factor for a building's energy performance and the general qualities of the interior space. As such, selecting the correct window frames for your home is a crucial decision.

Today – you cannot make your selection solely based on aesthetics, notes Cobus: "Electricity is becoming increasingly expensive, so when building or renovating, it is a wise idea to do everything in your power to minimise the costs of heating and cooling your home, and selecting the right windows is a critical step. Choosing energy efficient fenestration will not only save you a lot of money over their lifespan, but it is also the responsible thing to do regarding the environment."

However, choosing windows is a process that is fraught with confusion, as many people are not well versed on the technicalities that need to be considered before you can make the best choice. Cobus Lourens from leading window and door supplier, Swartland, offers some advice on how to go about selecting the windows that will offer you the best value with regards to investment and energy efficiency going forward.

The frame

The most obvious consideration is to look at what the windows are made from – this not only impacts on what the windows look like, but it has a major impact on how well they will insulate your home. Notes Cobus: "Look at what the window frame is made from – there are a variety of materials currently on the market, including vinyl, steel, aluminium and wood. Each material boasts its own set of positive and negative aspects, but the two most popular materials for energy efficient window frames are without a doubt wood and aluminium."

- **Timber windows**, such as Swartland's timber window frames for example, offer the best insulative value and the highest cradle-to-grave environmentally friendly credentials, however, they also require comparatively a little more upkeep than other materials.
- Aluminium windows, such as Swartland's KENZO range for example, may not be the top performing material in terms of heat transfer and loss, however aluminium is a very strong material that requires hardly no maintenance at all.

The glazing

The technical term for the glass that is installed in the window frame is glazing. Today, you can select windows that offer single-, double-, or even triple-glazing – this refers to the number of layers inherent in the window design. As a general rule, the more layers a window has, the better temperature and noise insulation it provides. An independent test by the South African Fenestration and Insulating Energy Rating Association (SAFIERA) showed that Swartland's double-glazed Cape Culture range of timber windows for example, are the most energy efficient windows in South Africa.

Glazing coatings can also play a massive part in the insulative qualities of fenestration, says Cobus: "Low-E glazing, or low emissivity glass, for example, is coated with a thin metallic substance that increases the window's ability to reflect, rather than absorb heat. Although Low-E glazing costs more than normal glazing, it can save you lots of money in the long run, as it ensures excellent insulation." He notes that apart from insulation, glazing can also come with coatings that offer other desirable qualities, such as protection, safety, security, solar and sound control, UV-protection, and decoration.

The installation

Build quality is another very important factor when it comes to the insulative qualities of any window, explains Cobus: "Even the most expensive and energy-efficient window will not perform effectively if it is not installed correctly. As such, it is essential that professionals install your windows."

He says that Swartland is well aware of the pitfalls of shoddy or inexperienced workmanship, and as such, it offers all its clients access to its exclusive One Touch Service: "Windows and doors are one of the largest expenses when it comes to building your home. So you want to get it right. And if you're the kind of person who won't settle for mediocre quality and service, then don't compromise.

"Through its One Touch Service, Swartland will provide you with an expert consultant who will guide you through the whole process – from selecting the right products, managing the delivery times, monitoring the installation quality, and being on-site before, during, and after the installation to ensure that the installation is completed to standard."

The law

In South Africa, the SANS 10400 National Building Regulations have been amended in the form of the XA appendices, in order to further enforce and regulate energy efficient practices in the built environment, with the long-term benefit of reducing overall energy consumption and CO2 emissions. Says Cobus: "By law, the windows you choose must be SANS 10400-XA-compliant, as a new build without compliant windows will not pass the building regulations and will be deemed unfit and hence, illegal."

Swartland for example, continuously tests its products to ensure that they are compliant with the National Building Regulations, explains Cobus: "All Swartland's windows are SANS 613 certified and compliant. They have all been tested for deflection, structural strength, water-resistance, air-tightness, operating forces, and the best possible energy efficiency."

With regards to glazing, make sure that your windows conforms to the safety regulations contained in the SANS 10137 Code of Practice, and that the Toughened Safety Glass and Safety Glass you purchase conform to the guidelines contained in SANS 1263.

Whether you are renovating or building from scratch, installing energy efficient windows, such as those from Swartland, will ensure that the energy savings that they offer will mean that the windows will end up paying for themselves in the long run. Cobus concludes: "By choosing wisely from the onset and investing in quality energy-efficient windows, you will not only be able to ensure that your home is better insulated and more comfortable to live in, but you will also be guaranteeing yourself massive savings on electricity usage over time."

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Released on behalf of Swartland (www.swartland.co.za) by The Line (www.theline.co.za, ant@theline.co.za).