

ゼロカーボンビル (T-ZCB) を実現する技術

Technologies to realize Zero Carbon Building

① 人を検知し照明・空調を制御する T-Zone Saver®

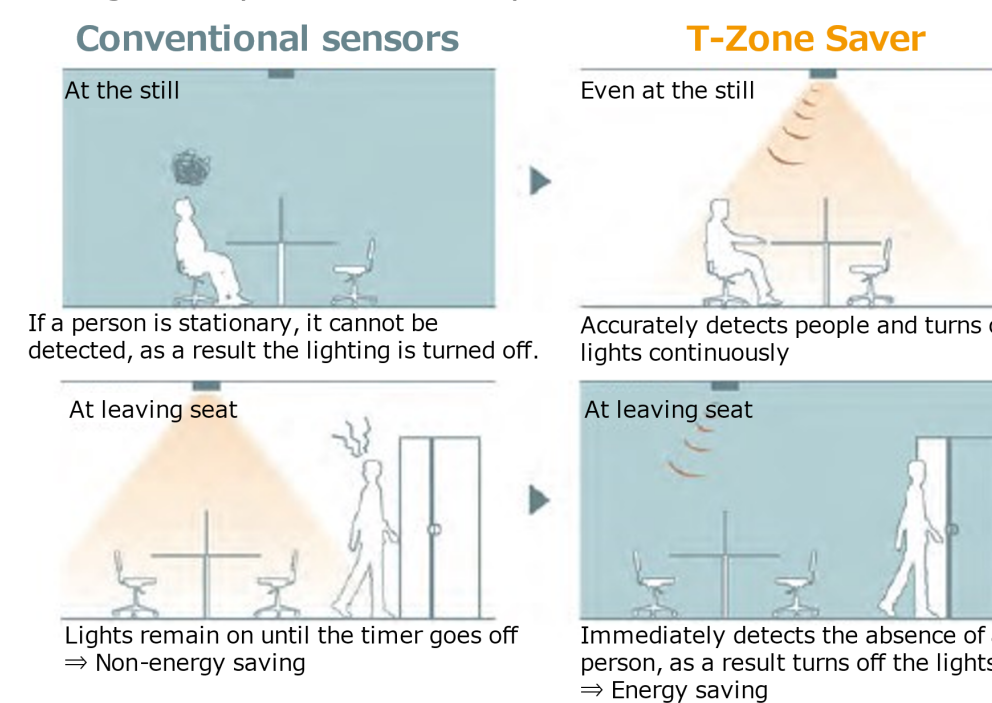
① “T-Zone Saver®” detects people and controls lighting and air conditioning

システムの中核を為す技術が、人体だけを確実に認識することができる「次世代型人検知センサ」です。人体の表面温度を計測し、人体以外のPCの発熱や日射等による温度との識別が可能のため、静止状態も含めた人の「在/不在」を正確にリアルタイムで認識します。

The key technology of the system is the “T-Smart Focus” designed to reliably recognize only the human body. It measures the surface temperature of the human body and can distinguish it from the heat generated by PCs or solar radiation other than the human body, so it can accurately recognize the presence/absence of a person in real time, including the stationary state.

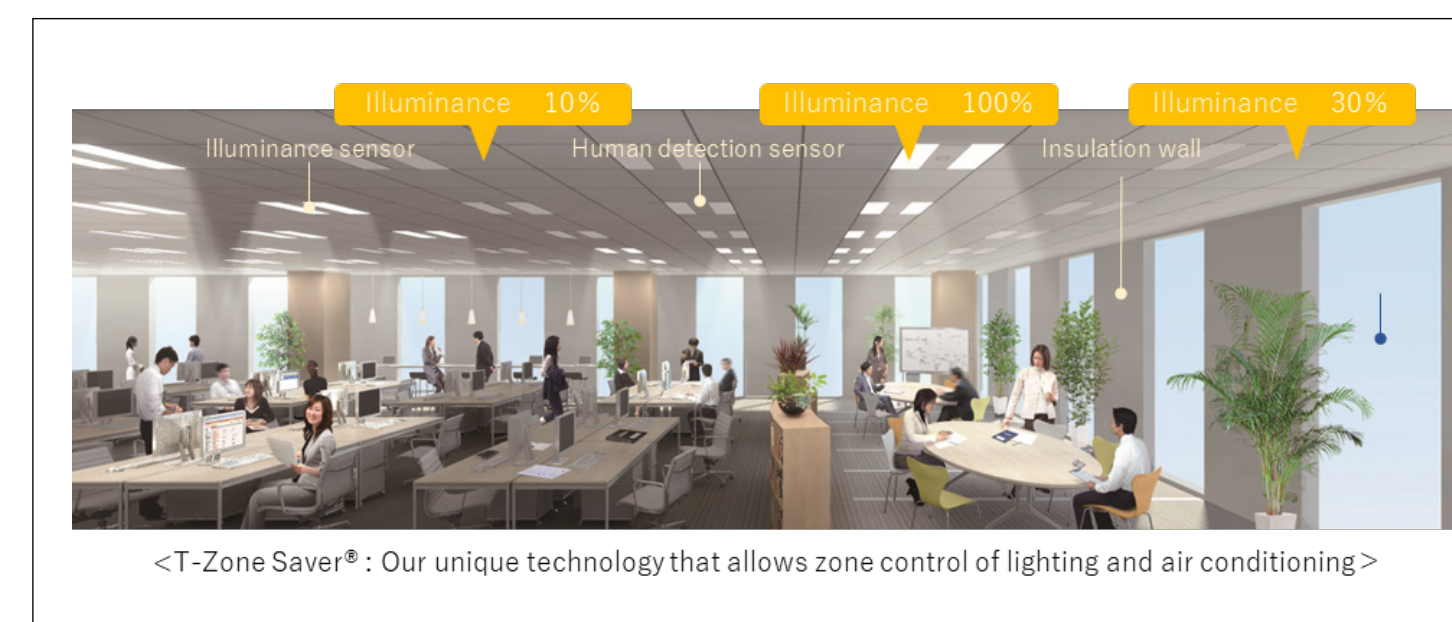
Lighting control

- Conventional sensors cannot detect people if they are stationary, as a result the lights turn off.
- “T-Zone Saver” accurately detects people even if they are stationary, as a result the lights stay on continuously.



従来型の人感センサは人が居ても静止すると検知できず、照明がOFF（誤動作）になってしまいます。次世代型人検知センサでは人が静止しても、正確に検知を継続して照明はONのままとなります。

A conventional sensor for the human body cannot detect the human body when a person stands still, and therefore the light is to be turned off (malfunction). “T-Smart Focus” can detect the human body accurately, and the light continues to turn on even when a person stands still.



「次世代型人検知センサ」を利用し、人の在席状況に応じてゾーン単位で空調及び照明を自動制御し、快適性を保ちながらエネルギー消費を最小化する自動環境制御システムです。

“T-Zone Saver®” is an automatic environmental control system that uses “T-Smart Focus”, the advanced human detection sensors, to automatically control air conditioning and lighting in zones according to the presence of people, minimizing energy consumption while maintaining comfort.

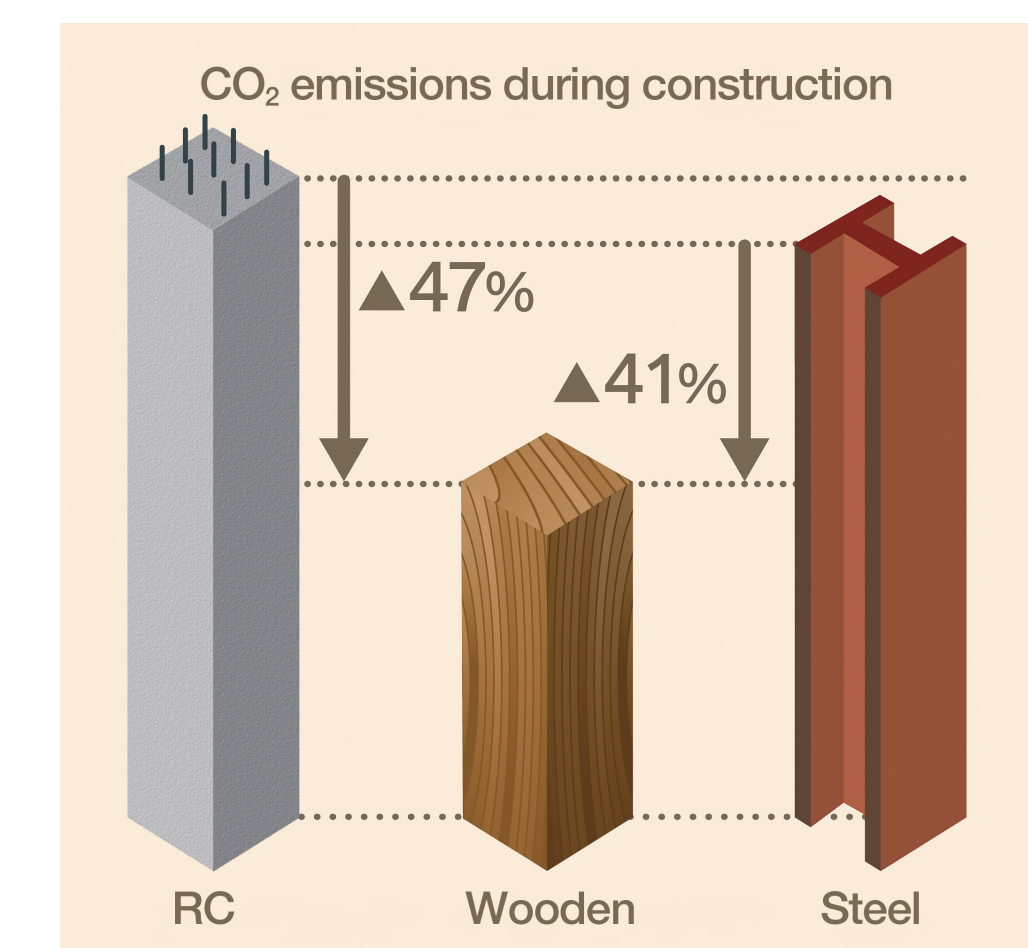
⑤ 木造・木質建築の技術

⑤ Technology of wooden and advanced wood architecture

TAISEI WOODEN BUILDINGS

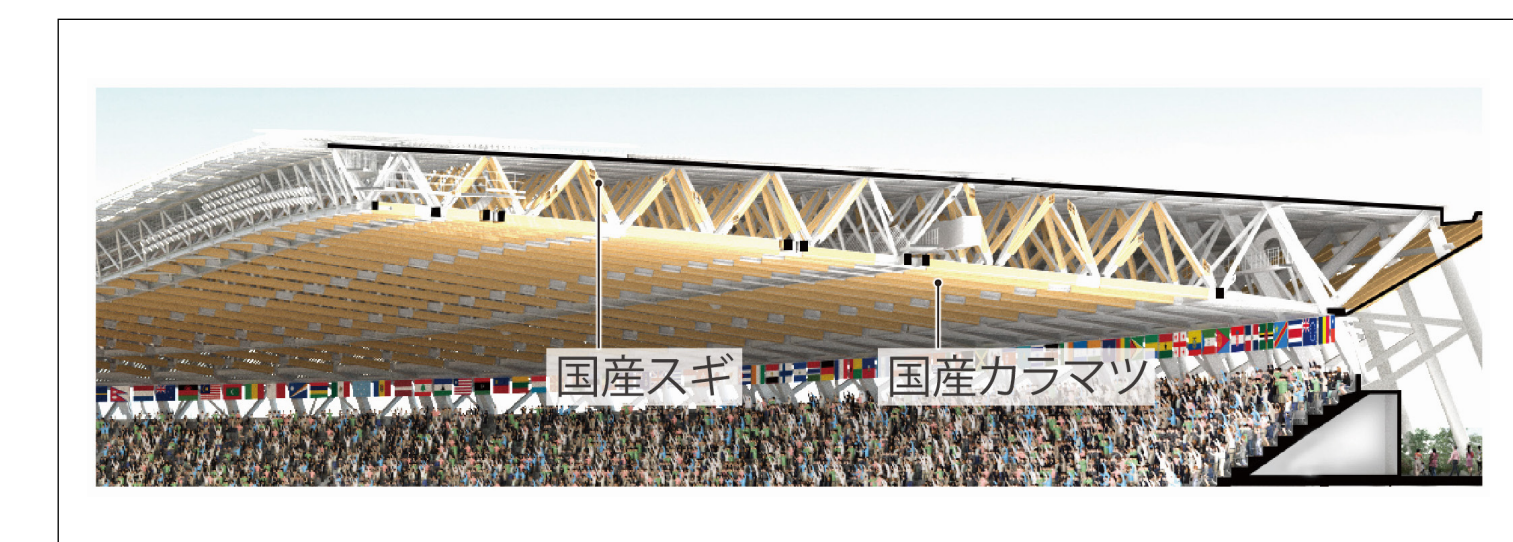
現代の建築に求められる性能や経済性を満たし、新築工事からリニューアルまで幅広く対応できる木造・木質建築のための技術として「T-WOOD®」シリーズの開発を推進しています。

We are promoting the development of the “T-WOOD®” series as technologies for wooden and advanced wood architecture that meets the performance and economic requirements of modern buildings and can be used in a wide range of applications from new building construction projects to renewal building construction projects.



建設時CO₂排出量を削減
・木材は材料製造や運搬の容易さから、RC造や鉄骨造に比べて建設時CO₂排出量が少ない材料です。

To Reduce CO₂ emissions during construction
・Wood is a material that emits less CO₂ during construction than reinforced concrete or steel structures because it is easier to manufacture and transport.



国立競技場
鉄骨と木材のハイブリッドトラスとし、木材の剛性を部材変形の抑制に利用しています。木材は国産の集成材で、下弦材はカラマツ、ラチス材にはスギを用いています。

Japan National Stadium
It is a hybrid truss made of steel and wood, and the rigidity of the wood is used to suppress the deformation of members. The wood is a domestic laminated wood, and larch and cedar are used.

