

## How PC are your PVC windows?

By Joe Lynam  
BBC World Service business reporter

**One of the biggest revolutions in the look of Britain's buildings in recent years has been in windows.**

The British government's efforts to cut energy use in homes has singled out windows for special attention.

All new and replacement windows now have to be double glazed to cut heat loss.

Consequently, wooden window frames have given way to PVC framed double glazing, which is cheaper to buy and install than double glazed timber frames.

In fact, wood double glazing can cost up to three times as much as PVC double glazing.

### **Brittle**

Many environmentalists acknowledge that double glazing helps cut energy use, but they also argue that PVC is a damaging chemical.

"The main problem with PVC is that it deteriorates with the action of ultraviolet light from the sun," says Jeff Howell, building expert, author and journalist for the Telegraph and the Independent newspapers in the UK.

"This apparently causes the chlorine to actually evaporate from the material and it goes brittle, it goes discoloured, you lean a ladder up against the window sill and after a few years it becomes so brittle that it just breaks off."

**" PVC is often sold as being a long-lasting energy saving material, but it's not "**  
Jeff Howell

The claim is refuted by industry officials who insist critics of PVC simply do not understand the material.

"They don't know what PVC is," says Jean Pierre DeGreve, of the European Council of Vinyl Manufacturers.

### **Insulation value**

Mr DeGreve argues that PVC is as environmentally friendly as the alternatives and generates benefits for consumers.

"People prefer PVC because they do not have to maintain the frame of the window," he says.

Not so, insists Mr Howell.

"People are often sold replacement PVC double glazed windows with the promise that it is going to save them money in the long run by keeping in the heat," he says.

"PVC is often sold as being a long-lasting energy saving material, but it's not. It lasts maybe 20 years."

Moreover, Mr Howell continues, "the frames themselves do not have a higher insulation value and the glass isn't all that it's cracked up to be".

### **Waste**

What happens at the end of a PVC window's life is also hotly disputed.

**" Some people sometimes want to change because they want a new design... It isn't up to date any more "**

Jean Pierre DeGreve, European Council of Vinyl Manufacturers

Mr DeGreve argues that PVC is "the polymer which is very easy to recycle, much easier than other plastics". But environmentalists refuted the argument, pointing out that in practice very few PVC window frames are currently recycled in Britain.

Some argue that it simply is not economical to separate the PVC from the window handles, glass and other parts.

And PVC cannot be sent to incinerators, because it releases dangerous chemicals if burnt.

Mr DeGreve, however, points out that wood windows may pose environmental threats too.

"If [consumers] choose wood they need to paint it regularly, and of course this is not environmentally friendly at all," he says.

"Additionally, at the end of the life of a wooden window frame you have to do something. You can put it in landfill, but of course you put the paint in landfill, or you have to incinerate it.

"It means you have to incinerate the paint, which is not productive for the environment."

### **Waste mountain**

At the heart of the pollution problem is the replacement of windows which in many cases could have been kept in place for longer.

Thornton Kay, of reclamation group Salvo, says the government has created a culture of window replacement by introducing rules that in effect outlaw the reuse of old windows.

"The problem we've got in the UK is that we are sending about 10 million windows a year to landfill. Maybe half of those are coming from demolished buildings," Mr Kay says.

"The other half is coming from the window replacement industry and it seems as though the window replacement industry is trying to educate people to think that windows are a consumer durable, like a washing machine.

"Every 10 years, you're just going to get rid of [your PVC windows] and get new ones. Whereas the [wood] windows that they're replacing could be a hundred years old, and with a certain amount of repair work could go on for another hundred years."

Again, the PVC industry denies the environmentalists' claims.

"If you are happy with the design of your window frame, you can leave it in place for 100 years, without any problem," says

"The point is, some people sometimes want to change because they want a new design. It isn't up to date any more.

"But it is the case with PVC, it is also the case with aluminium and it is also the case with wood."

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