## Trending Materials in Building Envelops

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## Advantages of Choosing New Materials Listed in the Next Slides are:

- •Ecological balance
- Green building material
- Economical structures
- Faster construction
- Aesthetic advantages

## **1.ETFE EthyleneTetrafluoroethylene**

fluorocarbon based polymer.

After ETFE is heated up and extruded into a paper thin film, it can be welded into large sheets that can be themselves be used as building films or can be woven as pumped air cushions.

When ETFE are fused into pillows and pumped with air, the materials take on both stability and high insulation properties.



These ETFE sheets are transparent like glass and transmit more light than glass.

Cost 24% to 70% less than glass to install.

ETFE sheets are chemically inert, so they don't degrade under UV rays.

As it has Teflon in it. It is non sticky, so it keeps itself clean.

Recyclable: At the end of the useful life of at least 50yrs to 200yrs it can be melted and reused...





## Aesthetics::

- You can print graphics onto it to avoid the sunlight penetration.
- By printing patterns on different layers, one can create kaleidoscopes that change and react to sunlight.

