In comparison to a demolition of existing buildings with severe technical deficits, usually the retrofitting of buildings is more effective in order to prepare them for low energy consumption and new necessities as communication and media connection or HVAC-installation (Heat, Ventilation and Air-Conditioning). Prefabricated retrofit solutions are developed throughout Europe to enable higher levels of industrialization in building envelope modernization and hence additionally improvements in energy efficiency. Five years of experience and a reasonable number of demonstrations done with timber-based element system (TES) facades show tendencies for best-practice building construction. This paper focuses on the jointing between single façade elements and the connection of those elements to the existing building. Being a crucial construction detail within the TES-facade, the joint area shall meet various requirements and challenges, from load bearing over hygro-thermal to fire safety functionality. The results of in-depth construction detailing lay out the requirements and principles of the TES joint.

Stichworte:
Energy efficiency, refurbishment, façade construction, timber construction, prefabrication, fire safety, building envelope
Kongress- / Buchtitel: SB13 Graz

Kongress / Zusatzinformationen: Sustainable Building Conference

Datum der Konferenz: 26.09 - 28.09

Jahr: 2013

Sprache: en

Occurences:
- Einrichtungen > Fakultäten > Ingenieurfakultät Bau Geo Umwelt > Lehrstühle > Lehrstuhl für Holzbau und Baukonstruktion (Prof. Winter) > 2013

Entries: