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Executive Summary

This report describes the module specifications and fabrication of the SUMMIT laminates.

In the first chapter, both the glass-backsheet and glass-glass module technologies are described. Followed by a brief explanation of the different modules for varying applications such as flat roof, pitched roof and facades. The specification table gives the most important parameters which are used as a starting point. Specific type of material or supplier names are not (always) mentioned, it only indicates the limits within the materials can be selected without excluding all other options. This gives the flexibility to also try new developed materials and makes the consortium less dependent on a single supplier.

The second chapter starts with a description of the Eurotron's Competence Center which is used to produce all the laminates. All the process steps are mentioned step by step. After production all modules are characterized. A short description is given for electroluminescence and IV curve measurement.

In the risk table all possible difficulties have been listed. Because most of the materials are not yet in mass production, the main risk will be if all materials can be delivered (in-time). Another point of concern with some relatively new materials is the interaction with each other.

This report is focussed on the back contact technology, the conventional H-pattern principle functions as fallback option. Since the main priority will be on the back contact technology, only the build-up of this technology has been described.

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