green building council australia
green star
environmental rating system for buildings

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Green Star Credit Cover Sheet Round 2

Green Star - Office Interiors v1.1
Inn-2 Exceeding Green Star Benchmarks

Points available: 5 **Points claimed:** 1 **CIR or TC Used:** N

Round 1 Assessment Comments
The project may wish to consider more clearly justifying why the use of this product should receive additional points over and above those claimed in IEQ-11 and Mat-2.

Compliance with Credit Criteria
The project will demonstrate how the use of InterfaceFLOR TacTiles for installation of InterfaceFLOR Glasbac carpet in the tenancy exceeds Green Star Benchmarks for IEQ-11 VOCs (Carpet and Adhesives) as well as the Green Star Benchmark in Mat-2 relating to Reusability.

Documents Provided
- [3] TacTiles IAQ report confirming VOC levels.
- [5] TacTiles brochure demonstrating carpet reusability.

Discussion
In the Round 1 advice from the Certified Assessors, it was stated that the project may wish to 'more clearly justify why this initiative should receive additional points over and above those claimed in IEQ-11 (Volatile Organic Compounds) and Mat-2 (Flooring)'. The project team would like to suggest that while achievement of points within IEQ-11 and Mat-2 was due to the use of the InterfaceFLOR carpet tiles installed in the space, further recognition is sought for the innovative method of adhering the carpet tiles within the tenancy.

While many carpets have been certified by GECA and receive full points in the Mat-2 calculator as well as full points in IEQ-11 for a low VOC carpet adhered to the tenancy space with low VOC adhesives, the project team would like to point out the fact that adhesives, by their nature inhibit the subsequent reusability of the carpet when it is no longer required in the office space.

This project has exceeded benchmarks relating to the IEQ-11 credit by using a carpet with an extremely low VOC content (see InterfaceFLOR Glasbac test certificate) and by omitting the use of carpet adhesives in its installation. The TVOC for carpet emission rate benchmark in the Green Star - Office Interiors v1.1 Technical Manual is 0.5 mg/m2 per hour. The Interface Glasbac carpet used within the GBCA tenancy is less than 0.01mg/m2 per hour. This equates to a TVOC emission rate 50 times lower than the required rate. Additionally, the TVOC emission rate of the TacTile adhesive

stickers is 0.21mg/m2 per hour as shown on the VOC test certificate attached. This giant improvement upon the Indoor Carpet Adhesive benchmark of 50g/litre. A standard carpet tile adhesive (such as Bostik Instant Pro - see Product Data Sheet below) covers 3m2/litre. Therefore, in the 664m2 of carpet, the TacTile has a TVOC of 0.139g (.00021g/m2 * 664m2), where a standard carpet tile adhesive with the benchmark TVOC content of 50g/litre could potentially have a TVOC of 11,067g within this tenancy (50g/m2 * 664m2). The use of TacTiles exceeds the VOC benchmark for carpet tile adhesive by 11,066.86 grams.

Through the use of the TacTile method of fixing the carpet tiles to the floor, the project exceeds the Green Star benchmark for Reusability (comprised of Modularity and Designed for Disassembly) within the Mat-2 credit. The carpet tile used is modular and can easily be transferred to another tenancy if needed. The carpet tile is not only designed for disassembly, but installed for disassembly, as well. The TacTile method of 'floating' the floor across the tenancy space ensures quick and easy removal of all carpet tiles with no damage to either the tiles or the subfloor. No adhesive residue is left on the floor, eliminating the local impact to the subfloor and the need for requiring clean up works, as well as minimising the greater environmental impact of the creation of the residue that would normally go to landfill.

The project team believes that in the case of carpet tiles, the definition of Designed for Disassembly (eg flooring that can be readily disassembled, using non-specialist tools, into elemental components for re-use, recycling, or reprocessing) is fully met by carpet tiles that can be removed from the floor and stacked for transport in order to re-use them elsewhere, for return to the manufacturer for reprocessing, or for transport to a recycling facility. In the case of carpet tiles attached with TacTiles, no tools are needed to pull the carpet up as they are not adhered to the floor. The carpet tiles can be left attached and rolled up or pulled apart and stacked on pallets for transport. As the carpet would be of no use to the user if disassembled further (ie yarn separated from backing), simple disassembly for reuse as carpet tiles is considered to meet this criterion. The product stewardship agreement between InterfaceFlor and the client demonstrates that when the carpet is no longer useful for its intended purpose, it will be collected by InterfaceFLOR and reprocessed into new carpet tiles.