

April 01, 2025

Honorable Mayor Honorable City Council Members

Re: Hempcrete Construction (2024 Technical Code updates) Amendment to adopt IRC 2024 Appendix BL, sponsored by Council Member Harper-Madison

Dear Mayor Watson and City Council Members.

The American Institute of Architects Austin (AIA Austin) draws from the expertise of its almost 1500 members to promote responsible and forward-thinking policies across a broad spectrum of architectural typologies, programs, and sectors. The common threads to our advocacy are embedded in the AIA Framework for Design Excellence, which promotes (among other things) resiliency and responsible, nature-based material selections with the ultimate goal of net zero carbon construction.

AIA Austin would like to thank Council Member Harper-Madison for sponsoring this initiative, and we are grateful to the Mayor and City Council for consideration of the proposed opt-in amendment to the International Residential Code ("IRC") to allow hempcrete as a nonstructural building material and wall infill system in our houses.

## Hemp-lime (Hempcrete)

Industrial hemp is a regenerative crop, produced in Central Texas, that improves soil health and, by growing at a fast rate, sequesters more carbon per acre than typical carbon offset crops like "slash pine" and other carbon forests. (*see: link*). Hemp's carbon-capturing capabilities are impressive. Unlike many other agricultural crops or trees, the CO2 absorbed by industrial hemp is locked within its fibers and can be used in a diverse range of applications (*see: link*).

Hempcrete is a cementitious biobased insulation material made with industrial hemp stalks, or "hurd," as the aggregate. When used at prescribed thicknesses for nonstructural walls or infill, hempcrete boasts thermal insulative properties satisfying our energy codes using a nature-based and carbon-negative alternative to conventional petroleum-derived products like fiberglass and most foams. It simultaneously offers thermal mass properties those systems lack.

With Austin's increasing susceptibility to wildfire – particularly in the Wildland Urban Interface – hempcrete boasts significant fire resistance properties. The ASTM E 84-19B test results for hemp concrete showed impressive performance for its "flame spread" and "smoke production" ratings. Perhaps more impressive, an Australian test simulating wildfire ember attacks, showed no damage to 8" thick hempcrete walls exposed to 24" high flames burning directly against them for 60 minutes. (*see: link*).

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## **Our Position**

IRC 2024's "opt-in" *Appendix BL: Hemp-Lime (Hempcrete) Construction*, governs the use of hemp-lime as a nonstructural building material and wall infill system, prescribing appropriate installation methods for its use in residential construction. We wholeheartedly support the amendment of Article 11 (Residential Code) of City Codes §25-12 (Technical Codes) to include its provisions.

Hempcrete is not novel to City of Austin – it has permitted multiple hempcrete residences under the somewhat onerous alternative methods pathway for compliance. We ask you to consider the adoption of *Appendix BL* to create a more straightforward pathway to permitting, while aligning with the city's Climate Equity Plan seeking to decarbonize Austin.

AIA Austin appreciates the opportunity to speak on these matters and looks forward to being a resource to the city as these reforms move forward. Please do not hesitate to reach out to discuss any of these items further.

Sincerely,

R.B.L.B.ILS

Burton Baldridge, FAIA AIA Austin President, 2025