





Indoor Air Quality Drywall



Comfortable living starts with better indoor air quality.

We spend approximately **90% of our time indoors,** so it is more important than ever to improve the quality of the air indoor air.

According to the EPA, levels of indoor air pollutants are two to five times higher than outdoor levels.

The primary culprit: Formaldehyde, the most common, cancer-causing, Volatile Organic Compound (VOC) found in indoor air.

Formaldehyde can enter a home through products like engineered wood furniture, computers, carpeting, treated fabrics, hair sprays and cleaning materials.

- Formaldehyde has been linked to asthma and respiratory problems
- 1 in 5 adults has an allergy to indoor air particles
- 1 in 7 children has asthma.

Exposure to formaldehyde vapors can produce a variety of short-term symptoms — headaches, fatigue, concentration problems, allergies, asthma and more.

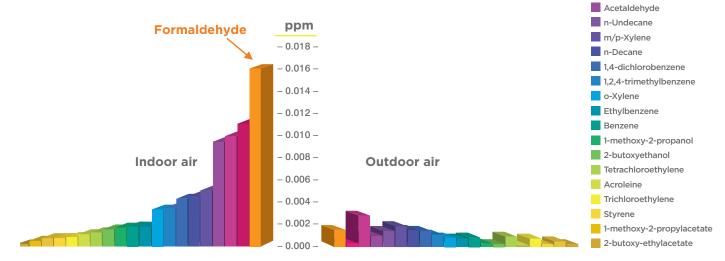
REFERENCES: https://cfpub.epa.gov/roe/chapter/air/indoorair.cfm https://www.forbes.com/sites/amywestervelt/2012/08/08/how-our-buildings-are-making-us-sick/#235af66075b1



According to the EPA, levels of indoor air pollutants are two to five times higher than outdoor levels.

Aldehydes, including formaldehyde, are the most prevalent pollutants in homes and schools.

VOC concentrations in the air



Analysis of chemical concentrations in residences, day care centers and school buildings indicate that VOCs (volatile organic compounds) are the most prevalent pollutants, with significantly higher levels in indoor air than in the outdoor atmosphere.

Formaldehyde

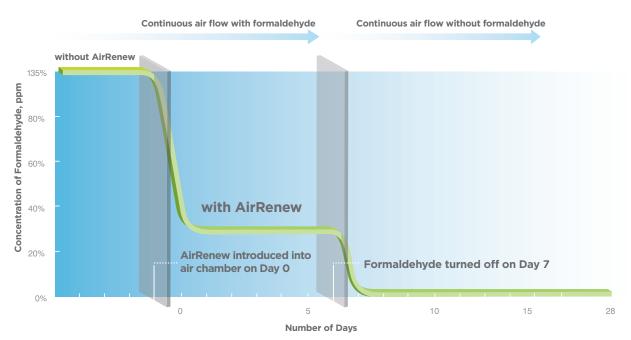
Hexaldehyde Toluene



AirRenew[®] helps take formaldehyde out of the air—and keeps it out.

- The AirRenew family of products help improve indoor air quality.
- The innovative patent pending technology actively reduces formaldehyde circulating indoors.
- CertainTeed offers a complete family of AirRenew drywall, including Essential and M2Tech.

The effectiveness of AirRenew® has been validated by UL Environment through laboratory testing using ISO16000-23 test method on unpainted AirRenew.



ISO 16000-23: Indoor air — Performance test for evaluating the reduction of formaldehyde concentrations by sorptive building materials. The effectiveness of the AirRenew process has been proven by tests conducted in accordance with ISO 16000-23, and validated by ULE through their Environmental Claims Validations program.

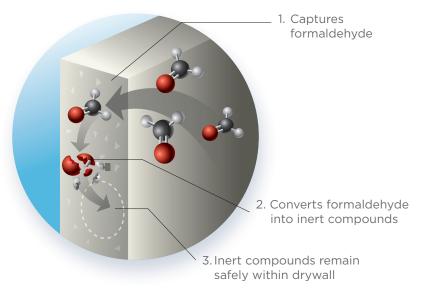


AirRenew starts working immediately and keeps working for up to 75 years.

How it works

This advanced drywall captures and converts formaldehyde into inert compounds, never releasing them back into the air.

The installation of AirRenew, along with good IAQ holistic design and good building operation practices, provides an effective strategy to reduce the exposure to formaldehyde.



Certifications:



UL Environment works to advance global sustainability and environmental health. UL Environment Claim Validations are independent proof that environmentally friendly products are exactly what they claim to be.

Mold Resistant claim not applicable to AirRenew Essential. Recycled Content claim varies by manufacturing plant.

The absorption rate of formaldehyde may be reduced by the application of primers and paints. CertainTeed Gypsum continues to evaluate the effect on AirRenew based on the wide range of primers and paints available in North America.

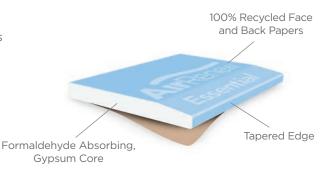




AirRenew[®] Essential is a cost effective indoor air quality solution, ideal for projects where mold and moisture resistance is not required.

AirRenew Essential

- Absorbs formaldehyde even when finished and painted with breathable, water based acrylic paints or covered with breathable wallpaper using conventional drywall techniques
- Easily recycled, in the same way as regular drywall
- Can be sent to landfill (if permitted locally) safe to humans, animals, and ground water
- Easy handling and installation like other CertainTeed drywall
- Available in Type X



Product Specifications

Product AirRenew Essential Drywall

Product Standards ASTM C1396 CAN/CSA-A82.27

Application Standards ASTM C840, GA-216 CAN/CSA-A82.31 **Thickness, inches (mm)** 1/2" (12.7), 5/8" (15.9)

Widths, ft. (mm) 4' (1220) 54" (1372)

Standard Lengths, ft. (mm) 8', 12' (2440, 3660) **Edges** Tapered

Weight

1/2" - 1.5 lbs per SF (8.3 kg/m²) 5/8" - 2.3 lbs per SF (11.2 kg/m²)

Flame Spread/Smoke Developed ASTM E84 CAN/ULC-S102 15/0 5/5

Core

1/2" (12.7 mm) Regular 5/8" (15.9 mm) Type X gypsum core, UL / cUL Classified, and ULC Listed for Fire Resistance

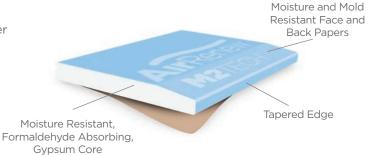




AirRenew[®] M2TECH[®] cleans the air by reducing formaldehyde circulating indoors and it has superior M2Tech[®] technology, providing enhanced moisture and mold resistance.

AirRenew M2Tech

- Provides an additional zone of protection against moisture and mold
- Achieves scores of 10 and 0 for mold resistance per ASTM D3273 and ASTM G21, respectively; the best possible scores for these tests****
- Enclosed in 100% recycled mold and moisture resistant paper
- Available in Type X



M2TECH

Mold is a serious concern when it comes to indoor air quality. The potential health effects associated with mold exposures include allergic reactions, asthma and other respiratory complaints. Reduce exposure to mold with CertainTeed products that contain M2Tech.

Product Specifications

Product AirRenew M2Tech Drywall

Product Standards ASTM C1396 CAN/CSA-A82.27

Application Standards ASTM C840, GA-216 CAN/CSA-A82.31 Thickness, inches (mm) 1/2" (12.7), 5/8" (15.9) Widths, ft. (mm)

4' (1220) Standard Lengths, ft. (mm)

8', 10', 12' (2440, 3050, 3660) Edges Tapered Weight

 $1/2^{\prime\prime}$ - 1.5 lbs per SF (8.3 kg/m²) 5/8^{\prime\prime} - 2.3 lbs per SF (11.2 kg/m²)

Mold Resistance Rating*** (ASTM D3273 and G21) 10 and 0

Moisture Resistance Less than 5% total water absorption per ASTM C473
 Flame Spread/Smoke Developed

 ASTM E84
 CAN/ULC-S102

 15/0
 5/5

Core

1/2" (12.7 mm) Regular 5/8" (15.9 mm) Type X gypsum core, UL / cUL Classified, and ULC Listed for Fire Resistance

*** No mold growth detected. Note – 10 and 0, respectively, are the best scores possible for these tests.

**** The performance of AirRenew M2Tech Drywall in actual use may not accurately reproduce the results achieved in this ASTM laboratory test. Good design and construction practices that prevent water and moisture exposure of building products are the most effective strategy to avoid the growth of mold.



Gypsum

Every day, walls come under attack — from bumps to mold, formaldehyde to sound transmission. CertainTeed drywall and corner solutions can fend off whatever life throws at it, creating superior durability, acoustic and indoor air quality solutions. See Why Walls Matter, in any project, with CertainTeed Gypsum. certainteed.com/wallsmatter

Habito[®] - the strongest 1/2" drywall on the market
No-Coat[®] Corner Bead - the durable corner
AirRenew[®] - indoor air quality drywall
SilentFX[®] QuickCut[™] - the acoustic drywall

learn more at: certainteed.com/drywall

ffrey Totaro, 2015





CertainTeed Corporation

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