





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 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 vapours 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

http://publications.gc.ca/collections/Collection/H46-2-90-156E.pdf http://publications.gc.ca/collections/Collection/H46-2-93-166Erev.pdf

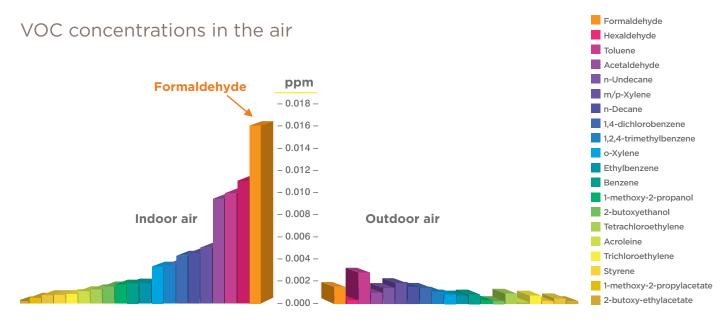
https://www.canada.ca/en/health-canada/services/environmental-workplace-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyde-pollutants-health/formaldehyd-

household-products-building-materials.html



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.



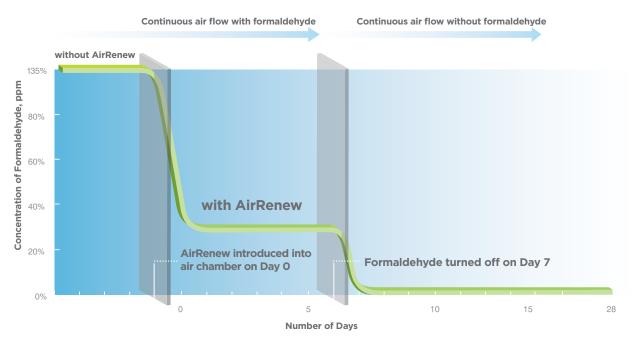
Analysis of chemical concentrations in residences, day care centers and school buildings indicate that VOCs (volatile organic compounds) are the most prevalent pollutants, with significantly higher levels in indoor air than in the outdoor atmosphere.



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 ISO 16000-23 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 UL Environment through their Environmental Claims Validations program.

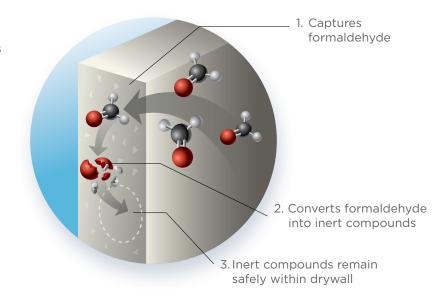


AirRenew® starts working immediately and keeps working for up to 75 years.

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 (indoor air quality) 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.

Mould 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 mould 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)
- Easy handling and installation like other CertainTeed drywall
- Available in Type X (fire-rated)



Product Specifications

ProductAirRenew 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)

Weight

1/2" (12.7 mm) - 1.5 lb per SF (8.3 kg/m²) 5/8" (15.9 mm) - 2.3 lb per SF (11.2 kg/m²)

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

Edges Tapered

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





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

AirRenew M2Tech

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





Mould is a serious concern when it comes to indoor air quality. The potential health effects associated with mould exposures include allergic reactions, asthma and other respiratory complaints. Reduce exposure to mould 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)

Weight

1/2" (12.7 mm)- 1.5 lb per SF (8.3 kg/m²) 5/8" (15.9 mm) - 2.3 lb per SF (11.2 kg/m²) Mould Resistance Rating** (ASTM D3273 and G21) 10 and 0 respectively

Moisture Resistance Less than 5% total water absorption per ASTM C473 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

Edges Tapered

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

^{*} 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 mould.

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



Gypsum

Every day, walls come under attack—from bumps to mould, 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.





learn more at: certainteed.com/drywall













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