# Cold Tough<sup>™</sup> Adhesive Portfolio

The Avery Dennison Cold Tough<sup>™</sup> Portfolio features a variety of industrial pressure-sensitive adhesive tapes that provide reliable performance in extreme cold weather applications and humid conditions.

In today's building and construction industry, your customers need every advantage they can get to stay a step ahead of the competition. This includes pressure-sensitive adhesive (PSA) tape products that perform across the entire spectrum of environmental conditions, from the depths of a frigid winter to the suffocating humidity of summer. These tapes must also have the durability to withstand the effects of climate change, including severe temperature swings, long droughts, or periods of heavy precipitation.

The Avery Dennison Cold Tough™ Portfolio is a sound solution for such environments.

With its unique adhesive chemistry, Cold Tough products are engineered for extensive use in a wide range of building & construction applications. Building & construction product manufacturers can offer solutions made with Cold Tough adhesives to meet a broader range of contractor needs. Tape converters can, in turn, offer Cold Tough to manufacturers as an easy-to-use, durable bonding solution for extreme environments.



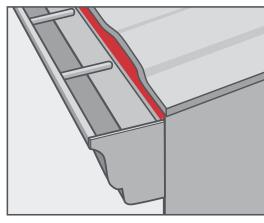


### Applications

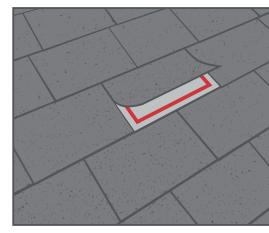
Cold Tough<sup>™</sup> adhesive tape constructions are engineered for seaming and joining in building & construction applications, including metal building assemblies that require high performance under extreme conditions, including cold weather.

- Roofing
- Exterior walls
- Ductwork
- Doors and windows
- Overhead doors
- Gutters
- Joists

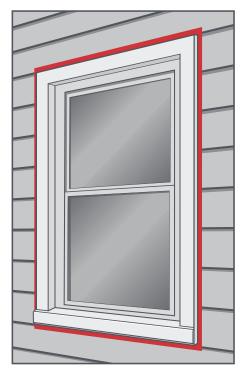
According to Coherent Market Insights, the global metal building system market is forecast to grow from \$493 M to \$1.09 B from 2022 to 2030 (9.2% CAGR). Costeffective and efficient, these buildings are used for manufacturing, warehousing, distribution, retail, hangars, offices, libraries, churches and hospital spaces.



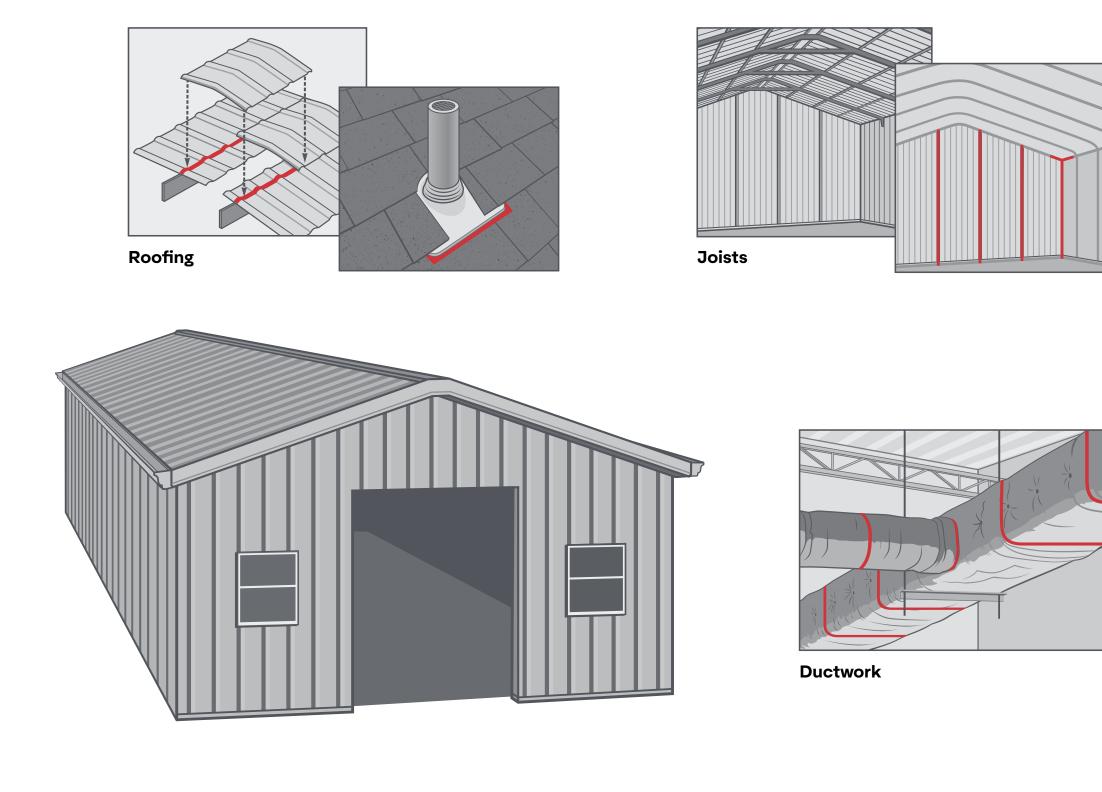
Gutters

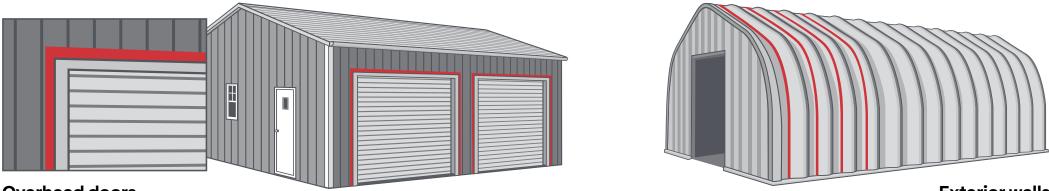


Shingles



**Doors and windows** 





**Overhead doors** 

**Exterior walls** 





# **Avery Dennison Portfolio Advantages**

Building & construction contractors value bonding solutions that help them save time and effort. They also need confidence in the solution's long-term performance and durability. Cold Tough<sup>™</sup> tape constructions offers these advantages:



#### Weather robustness and UV stability

Tested for installation temperatures down to 0F (-18 Celsius) with a service temperature of -40F (-40 Celsius). Superior performance for high humidity, wet conditions; and substrates that tend to accumulate condensation. Engineered for long-term durability even with regular exposure to sunlight.



### Bonding performance, regardless of surface

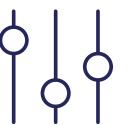
Superior bonding for high surface energy substrates, such as metals, and low surface energy substrates such as plastics.

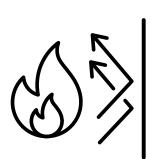


### Ease of use and conformability

A "mess-free" alternative to liquid adhesives. Easy application and long-term durability around metal joists, seams, and other edged features.

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#### **Custom configurations**

Choose from multiple tape and adhesive configurations to match the needs of your application. These include quickstick/high-tack adhesive formulations and single-coated foam tapes for insulation purposes. You can also request custom formulations from our lab.

#### Thermal break capabilities

Provide insulative properties for flanges and purlin designs. Reduces heat conductivity between framing, paneling, roof and walls in metal buildings.

### Cold Tough<sup>™</sup> product portfolio

Application	Product	Adhesive Type
Roofing	FT 9380	Cold Tough™ Rubber
Overhead Doors	Fasson <sup>®</sup> SSL	Cold Tough™ Acrylic
Doors & Windows, Gutters, Overhead Doors	FT 9381	Cold Tough™ Acrylic
Ductwork, Exterior Walls	FL 0833*	Cold Tough™ Acrylic
Ductwork	Fasson <sup>®</sup> 9200	Cold Tough™ Acrylic
Doors & Windows, Exterior Walls, Joists, Roofing	FT 4260	Cold Tough™ Acrylic
Exterior Walls, Gutters	FM 0316	Modified Acrylic

\*Included in the Core Series™ Portfolio

Construction	Thickness without liner (mils)	Thickness without liner (µm)
Double Coated	3.5	88.9
Double Coated	3.5	88.9
Double Coated	7.7	195.6
Single Coated	4.8	121.9
Single Coated	4.9	124.5
Single Coated	6.0	152.4
Single Coated	65.0	1651.0

# Beyond Bonding: Expansive Product Selection, plus Customization and Testing Capabilities

The Cold Tough<sup>™</sup> Portfolio is the latest in a long line of high-performance PSA solutions for the building and construction industry. But innovative bonding products are just the beginning of all we offer.

### Collaboration

- New product development for developing custom solutions for specific applications
- Business development and specification support for emerging applications
- Application engineering and technical support
- Global reach

### Testing

- ISO 9000 certified and ISO 17025 accredited laboratory
- Industry-standard testing and custom application testing
- Mechanical and analytical pressure-sensitive adhesive testing capabilities
- Pressure-sensitive adhesive bulk property testing (peel, tack and shear)
- Environmental conditioning (temperature, humidity, UV, chemical and more)

We welcome the opportunity to collaborate with you to develop custom tape solutions. You'll enjoy access to testing facilities and subject matter experts who understand your challenges. We can work together to produce one-of-a-kind products that help give your business an edge.

To learn more about the Cold Tough<sup>™</sup> Portfolio, contact your Avery Dennison Performance Tapes account manager or visit tapes.averydennison.com/buildingandconstruction.

specific applications applications









### **About Avery Dennison**

Avery Dennison Corporation (NYSE: AVY) is a global materials science and digital identification solutions company that provides branding and information labeling solutions, including pressure-sensitive materials, radio-frequency identification (RFID) inlays and tags, and a variety of converted products and solutions. The company designs and manufactures a wide range of labeling and functional materials that enhance branded packaging, carry or display information that connects the physical and the digital, and improve customers' product performance. The company serves an array of industries worldwide, including home and personal care, apparel, e-commerce, logistics, food and grocery, pharmaceuticals and automotive. The company employs approximately 36,000 employees in more than 50 countries. Reported sales in 2022 were \$9.0 billion. Learn more at <u>www.averydennison.com</u>.

### **About Avery Dennison Performance Tapes**

Avery Dennison Performance Tapes is a world-class operation focused on developing and manufacturing high performance pressuresensitive adhesives and tapes for a broad range of applications in automotive, appliances, electronics, building and construction, specialty industrial and personal care segments. The organization has 50 years of experience supplying standard and customized pressure-sensitive materials designed to deliver innovative solutions for customers' needs across the globe. Worldwide manufacturing facilities ensure a global presence supported by local sales, technical and customer service throughout the regions. Learn more at www.tapes.averydennison.com.



#### tapes.averydennison.com

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