A look inside the Duration Coil

Built with American Standard's legendary durability and performance

Introducing the latest technological advancement in air conditioning, the Duration™ coil from American Standard Heating & Air Conditioning. With the adoption of advanced heat exchanger technology, American Standard is once again giving customers what they want, while making cool, comfortable summers affordable for every family. Units using Duration coil technology will be lighter, stronger, smaller and more efficient than anything else in their SEER range.

Take a closer look inside the all-aluminum Duration

All-aluminum construction

coil and you'll see just how cool it is.

Because it's made entirely of aluminum, the Duration coil not only resists corrosion from the elements, it also experiences none of the bimetallic corrosion associated with copper-and-aluminum coils.

Shaped for efficiency

The wide, flat shape of the refrigerant tubes allows for more efficient tube to refrigerant surface contact and more efficient airflow, resulting in more heat transfer to the outside air than conventional plate fin technology. And, rather than using one large tube, the Duration coil uses multiple small channels within

American Standard quality and reliability within reach of every consumer.

each tube, allowing the entire system to operate more efficiently and

Duration coil technology puts

each tube, allowing the entire system to operate more efficiently and with a lower refrigerant charge.

One inlet and one outlet

Rather than using a complex manifold to route refrigerant, the Duration coil uses only one inlet and one outlet. This serves to reduce the number of brazed joints, reducing the likelihood of leaks.

Familiar technology with a new use

Advanced heat exchanger technology has already proven itself to be incredibly reliable and durable in the

automotive industry, where it has been used

in the air conditioners of millions of cars. If it can survive and efficiently transfer heat under the grueling conditions of the road, imagine what it can do on the side of a house.





The Duration™ coil advantage

The unique construction of the Duration™ coil increases performance in several ways. Because of its tough aluminum construction and its close integration with the fins of the coil, the Duration coil is inherently strong, resisting direct pressure, bending and twisting. A leading tube edge 2.5 times thicker than the walls of the tube further enhances structural strength and rigidity, while helping to prevent cracks and leaks.

Since the top and bottom tube are not part of the refrigerant circuit, the Duration coil is resistant to refrigerant leaks caused by rubbing from the base or the top of the unit in which it's installed.

Smaller refrigerant channels allow the use of a reduced refrigerant charge. This is not only good for the planet, it helps reduce install time and enables dealers to stock a smaller inventory of refrigerant.

Because it can transfer heat efficiently using less overall metal, the Duration coil makes any unit in which it's installed lighter and easier to transport.

The Duration coil is much smaller than comparable copper and aluminum coils, allowing for the construction of much smaller air conditioners. In some cases, up to a foot shorter and 40% smaller in volume overall. This allows an unprecedented level of portability and ease of installation.

Duration Coil

Advanced heat exchanger technology

Tested to the same standards as the rest of our family

The Duration™ coil undergoes the same strenuous testing as every other component we make. During its 16 weeks in the Systems Environment Extreme Testing (SEET) lab, the Duration coil will undergo years of simulated abuse under harsh environmental and mechanical stress. Additional testing involves subjecting the Duration coil to more than 3 million pressure



cycles. That's more than 6 times the number of cycles a coil would normally experience in its lifetime, and 12 times more than UL standards dictate.

The Duration coil's design offers several advantages over traditional plate fin construction, including less charge, greater strength, reduced weight and easier equipment installation.

Easy to clean and maintain

The inherent strength of the Duration coil allows for safe and easy cleaning. This helps the Duration coil maintain like-new efficiency for years.



New marketing opportunities

Multi-family property managers and builders will appreciate the Duration $^{\text{TM}}$ coil's reliability. Because of its reduced weight, it allows the construction of smaller, lighter air conditioners that are easier to transport, store and install.

Builders operating in the starter home market will appreciate the ability to offer budget-sensitive customers American Standard reliability, rather than substituting a less-reliable, lower-quality unit. As an added assurance, American Standard backs each Duration coil with a 10-year warranty.



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