



Subject: The Next Generation of DOW FILMTEC™ Residential RO (Reverse Osmosis) Membrane Elements

Dear Valued Customer,

Dow Water & Process Solutions, a business unit of The Dow Chemical Company and its consolidated subsidiaries, is committed to providing to the market place innovative products and solutions. As part of this evolution, Dow is pleased to announce the launch of its next generation of DOW FILMTEC™ residential reverse osmosis (RO) elements.

The new and improved products will be available in the second quarter of 2010 and will be manufactured on state-of-the-art, fully automated fabrication equipment. From raw materials to final packaging, DOW FILMTEC residential RO elements are precisely manufactured to rigorous, pre-defined specifications. Robust quality control processes and an innovative high resolution element integrity test ensure consistent product quality. The ability to consistently produce identical, high quality products time and again means DOW FILMTEC elements offer customers the most reliable elements available in the industry today. The new production line will improve our service levels to meet increasing market demand.

Dow's next generation residential RO elements have been precisely designed to replace existing DOW FILMTEC™ residential RO products. Performance specifications are identical for both DOW FILMTEC existing and next generation of products, and no changes are required to element housings or flow restrictors. The next generation elements are also NSF/ANSI 58 certified, except for the 100 GPD elements which are just completing the certification process. The next generation encompasses all standard DOW FILMTEC elements, including:

TW30-1812-24

TW30-1812-50

TW30-1812-36

TW30-1812-75 TW30-1812-100

Here is an example of one of our next generation products the TW30-1812-75.



Dow is pleased to share below a list of product improvements and enhanced benefits:

• **Completely redesigned element:**

Dow has completely redesigned all standard DOW FILMTEC residential RO elements using optimized materials of construction and our industry leading product development capabilities. The next generation design offers equivalent or superior overall performance compared to existing DOW FILMTEC standard products. Elements with flow rate equal or greater than 50 GPD now have a two leaf design improving element efficiency and water quality while maintaining the trouble-free operation you have come to expect from DOW FILMTEC elements. The new element is compatible with all element housings that have previously used DOW FILMTEC residential elements.

Innovative, patent pending, brine seal design replacing the manually applied taped u-cup brine seal. Exhaustive studies demonstrated that installation and removal of the element into and out of the housing is comparable with current taped brine seal design. The new and unique brine seal provides the following benefits:

- **Reliable seal:** when residential RO systems are not in use, the brine seal is used to direct rinse water through the element scroll to improve pure water quality and reduce scale formation. Taped on, u-cup brine seals depend on flow direction and pressure drop through the element scroll to "inflate" them and form a tight seal. In most residential systems, the rinse water flow rate through the scroll is limited by a flow restrictor to conserve water. If it is too low, the pressure drop required to inflate the u-cup falls below one psi which does not always create a reliable seal. Dow's innovative brine seal design forms a press-fit between the element and the housing that does not need on pressure drop through the scroll to make a reliable seal.
- If pressure spike occurs, the innovative brine seal also has another benefit. During initial residential RO system charging, feed water pressure spikes can occur across an element until water completely fills the element housing. Pressure spikes can cause taped u-cup seals to slip and deform creating a permanent leak. Dow's new brine seal is designed to relieve then reseal should a pressure spike occur.

• **Brand protection:**

Incorporation of multiple security features such as:

- Enhanced hologram label design with multiple anti-counterfeiting features which include:

- o Water drop symbol and text holograms
- o A DOW FILMTEC™ product code and model description
- o A unique imprinted product serial number
- Two-color water permeate tube, one end is white and the other blue, one more way to help you and your customers identify a genuine DOW FILMTEC product!

These features improve the protection of a recognized and leading brand in the industry today.

◆ **Quality Assurance:**

Enhanced quality control throughout the entire production process; eleven different quality checks monitor all critical dimensions and product characteristics. 100% of all DOW FILMTEC™ residential elements must pass an element integrity test before packaging to ensure our customers receive defect-free products.

The increased capacity, advanced automation and quality control will allow us to keep providing high quality DOW™ FILMTEC™ residential RO elements. Dow understands that quality products provide critical support for your reputation in the market place, and help you increase consumers' satisfaction with your products.

We are always interested in hearing from our customers. If you would like to share your feedback, please e-mail your comments to [dowresidentialwater@dow.com](mailto:dowresidentialwater@dow.com) or visit our website at: [www.dow.com/genuine\\_ro](http://www.dow.com/genuine_ro) to learn more about DOW FILMTEC™ residential RO elements.

We look forward to a successful launch and transition.

Sincerely,

Peter Wang  
Account Executive  
Dow Water & Process Solutions

Leticia Jensen  
Marketing Manager  
Dow Water & Process Solutions