New 3M Conceal Film Masks Cell Site Infrastructure to Aid Site Acquisition

Radio frequency transparent technology on display at 2016 CTIA Super Mobility, booth #4040

Wireless infrastructure can be a visual nuisance to its host communities. The new <u>3M™</u> Conceal Film eliminates visual pollution by adhering to antennas and blending cell site equipment into its surrounding environment with no impact to radio frequency performance and no signal degradation. By combining several of 3M's core technologies and with its expertise in films and adhesives, the 3M Conceal Film offers an effective yet unobtrusive solution for visual pollution. The new film will be on display during the <u>2016 CTIA Super</u> <u>Mobility</u> conference at the 3M booth #4040.

At present, many cell site expansion projects stall during negotiations involving project planners and city government. Debates over land use and visual aesthetics are common, and can cost developers and carriers valuable time and resources during the expansion process. 3M Conceal Film makes it easier for carriers to place needed infrastructure and helps municipalities provide residents with best-in-class connectivity without compromising their community's visual appeal.

"The wireless industry is once again going through a new revolution where ubiquitous communications, vast infrastructure, massive connectivity, reduced latency and sustainability are the new norm," Omar Flores, 3M global business manager, said. "At 3M, we have developed a unique film that allows the industry to conceal infrastructure, which enables mobile operators to deploy and blend networks for reduced visual pollution with no radio frequency interference."

3M Conceal Film is a new generation of the company's high-performance, nonmetallic reflective film technology. Reflective over the full visible spectrum and capable of radio frequency transmission into the microwave range, 3M Conceal Film is specially formulated with an adhesive backing that provides long life in outdoor environments and excellent ultraviolet irradiance stability.

Attributes of the new 3M Conceal Film include:

Radio frequency properties – Metal-free, the film's alternating polymeric layers reflect visible light while enabling an unobstructed transmission of radio frequency signals. Adhesion – The 3M[™] Controltac[™] Graphic Film with 3M[™] Comply[™] Adhesive system provides a simple, initially repositionable, bubble-free application using a "dry" application method.

The development of 3M Conceal Film comes on the heels of a growing demand for cell site infrastructure to keep pace with increased mobile use worldwide. According to the 2016 Ericsson Mobility Report, global mobile subscriptions are growing 3 percent year-on-year, totaling 7.4 billion in the first quarter of 2016. That's only one part of the industry's growth. The same study reports mobile broadband subscriptions growing some 20 percent year-on-year, for a total of 140 million subscriptions in the first quarter of 2016. Mobile carriers are continually increasing capacity and coverage — building new cell sites — to stay competitive. Carriers can potentially achieve faster site acquisition by reducing the visual impact of cell sites — a major benefit of 3M Conceal Film.

Pioneering new innovations for the future of mobility, 3M creates network solutions that help connect people, build businesses and improve lives. At 3M, we're using science to create a higher form of communication. We are helping companies thrive in today's data-driven economy, bringing people closer by taking networks farther. Find out more at <u>3M.com/Telecom</u> or follow <u>@3MNetworks</u> on Twitter. At 3M, we apply science in collaborative ways to improve lives daily. With \$32 billion in sales, our 90,000 employees connect with customers all around the world. Learn more about 3M's creative solutions to the world's problems at <u>www.3M.com</u> or on Twitter <u>@3M</u> or <u>@3MNewsroom</u>.

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Multimedia Files:

M⢠Conceal Film uses advanced film technology to blend cell site antennas and other wireless infrastructure to the environment. (Photo: Business Wire) ownload:

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M⢠Conceal Film helps eliminate visual pollution with no impact to radio frequency performance and no signal egradation. (Photo: Business Wire) iownload: iownload original 8.61 MB 4500 x 3000 iownload thumbnail 51 KB 200 x 133 iownload lowres 275 KB 480 x 320 iownload square 121 KB 250 x 250

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Additional assets available online: Additional assets available online:

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