

# Flexible Bonds Powering Urban Mobility.



Several global trends, including the increase in urbanization, force city planners and policymakers to look at improving their rail access as a means to keep the mobility within cities and in-between cities running smoothly. At the same time, train operators are looking to lightweight trains, which reduce maintenance needs for the rail infrastructure.

L&L Products facilitates concepts for lightweight trains by offering core-splice and edge filling solutions that allow train designers to apply composite sandwich panels more extensively in the train interior. By doing so, the functionality of the interior can be significantly enhanced while keeping the weight of the interior to a minimum. Since the structure of trains nowadays is still mainly metal-based, manufacturers are in need of flexible

bonding systems attaching the interior composite panels to the train's structure. L&L Products provide solutions for highly flexible adhesive systems based on epoxy, methacrylate or Silyl modified technologies, to cover the immediate requests of train engineers.

All L&L Products rail solutions have certification in line with the latest FAR and EN45545-2 fire protection and FST requirements. We always emphasize offering our customers lower costs, either by optimizing open time/cure time to the application needs or by automating the application process and reducing the need for manual labor. In addition, L&L Products' highest priority is to protect workers as well as passengers by providing adhesives with low to no odor and the lowest toxicity possible in this application space.