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1.6.3 Substrate Preparation; 1.6.4 Adhesive Application and Assembly; 1.6.5 Cure; 1.6.6 Specimen Cleaning; 1.7 Modified Thick Adherend Shear Test; 1.7.1 Specimen Geometry; 1.7.2 Bonded Specimen Geometry; 1.7.3 Machining of the Samples with Beaks; 1.8 Preparing Butt Joints; 1.8.1 Introduction; 1.8.2 Mold; 1.8.3 Substrate Preparation; 1.8.4 Adhesive Application and Assembly; 1.8.5 Cure; 1.8.6 Specimen Cleaning; 1.8.7 Alternative Manufacturing Method; 1.9 Preparing Napkin Ring Specimens; 1.9.1 Introduction; 1.9.2 Adherends; 1.9.3 Joint Manufacture-Alignment Jig; 1.9.4 Introduction of the Adhesive; 1.9.5 Final Specimen Preparation; 1.10 Preparing T Joint Specimens; 1.10.1 Introduction; 1.10.2 Mold; 1.10.3 Substrates Preparation; 1.10.4 Adhesive Application and Assembly; 1.10.5 Cure; 1.10.6 Specimens Cleaning; 1.10.7 Results; 1.11 Preparing Flexible-to-Rigid Peel Specimens; 1.11.1 Introduction; 1.11.2 Mold; 1.11.3 Adherend Preparation; 1.11.4 Adhesive Application and Assembly; 1.11.5 Cure; 1.11.6 Final Specimen Preparation; 1.12 Preparing Specimens for Fracture Properties: Double Cantilever Beam and Tapered Double Cantilever Beam; 1.12.1 Introduction; 1.12.2 Bonding Jigs; 1.12.3 Specimen Dimensions; 1.12.3.1 DCB Specimens; 1.12.3.2 TDCB Specimens; 1.12.4 Substrate Conditioning and Preparation; 1.12.4.1 Storage and Substrate Conditioning; 1.12.4.2 Surface Pretreatment; 1.12.5 Adhesive Application and Forming the Joint; 1.12.5.1 Adhesive Handling and Application; 1.12.5.2 Control of Bondline Thickness; 1.12.5.3 Introduction of the Initial Crack; 1.12.6 Cure; 1.12.7 Final Specimen Preparation; 1.13 Preparing Bonded Wood Double Cantilever Beam (DCB) Specimens; 1.13.1 Introduction; 1.13.2 Aspects of Wood Bonding; 1.13.3 Sample Preparation; 1.13.3.1 Wood Preparation; 1.13.3.2 Adhesive Types

Sommario/riassunto

Joining techniques such as welding, brazing, riveting and screwing are used by industry all over the world on a daily basis. A further method of joining has also proven to be highly successful: adhesive bonding. Adhesive bonding technology has an extremely broad range of applications. And it is difficult to imagine a product - in the home, in industry, in transportation, or anywhere else for that matter - that does not use adhesives or sealants in some manner. The book focuses on the methodology used for fabricating and testing adhesive and bonded joint specimens. The text covers a w