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Nota di contenuto	""Cover""; ""CONTENTS""; ""1 DESIGN PHILOSOPHY AND DESIGN CONSIDERATIONS FOR STRUCTURAL COMPOSITE MEMBERS AND CONNECTIONS""; ""1.1 Introduction""; ""1.2 Background""; ""1.3 Design Approaches""; ""1.4 Design Loads""; ""1.5 Safety Factors""; ""1.6 Guaranteed Mechanical Properties""; ""1.7 Proposed Philosophy""; ""2 CHARACTERIZATION AND BEHAVIOR OF BOLTED COMPOSITE JOINTS""; ""2.1 Background""; ""2.2 Mechanical Behavior of Bolted Joints""; ""2.3 Factors Influencing Bolted Joint Strength""; ""3 ANALYSIS AND DESIGN OF BOLTED COMPOSITE JOINTS""; ""3.1 Background"" ""3.2 Efficiency of the Bolted Joint""""3.3 Design of the Single-Bolted Joint""; ""3.4 Design and Analytical Procedure""; ""3.5 Numerical Examples""; ""3.6 Design of Multi-Bolted Joints""; ""3.7 General Design Considerations""; ""3.8 Rules of Thumb for Designing Bolted Composite Joints""; ""4 STRUCTURAL ADHESIVES""; ""4.1 Introduction""; ""4.2 Mechanics of Adhesion""; ""4.3 Factors Affecting the Capacity and Integrity of Adhesively Bonded Joints""; ""4.4 Important Adhesive Properties""; ""4.5 General Properties of Adhesives and Adherends""; ""4.6 Surface Pretreatment"" ""4.7 Selection Process""""4.8 Types of Adhesives""; ""4.9 Standard Test Methods for Structural Adhesives""; ""4.10 Essential Information""; ""4.11 Common Causes of Adhesive Failure""; ""4.12 Material Safety

Data Sheets"; ""5 ANALYSIS AND DESIGN OF ADHESIVELY BONDED COMPOSITE JOINTS"; ""5.1 Introduction"; ""5.2 Types of Stress Conditions Developed in Composite Bonded Joints"; ""5.3 Bonded Joint Configurations"; ""5.4 Failure Modes"; ""5.5 Adhesive Stressa€?Strain Characterization"; ""5.6 Load Transfer in Adhesively Bonded Composite Joints""

""5.7 Analyses and Design of Composite Bonded Joints""""5.8 Design Recommendations"; ""6 COMBINED JOINTS"; ""6.1 Introduction"; ""6.2 Review of Related Work"; ""6.3 Advantages and Applications of Combined Joints"; ""6.4 Behavior of Combined Bonded/Bolted Composite Joints"; ""6.5 Mechanically Fastened/Welded Joints for Thermoplastic Composites"; ""6.6 Concluding Remarks""; ""7 BEHAVIOR OF PULTRUDED COMPOSITE FRAME CONNECTIONS""; ""7.1 Introduction""; ""7.2 Impact of Connection Detail Design on the Overall Behavior of Pultruded Composites Frame Structures""

""7.3 Codes and Standards Activities""""7.4 Pultrudersa€? Design Guides"; ""7.5 PFRP Connections: Related Work""; ""7.6 A Case Study of Durability of Pultruded Fiber-Reinforced Polymer Composites in Harsh Environments""; ""7.7 Connection and Reinforcement Details for PFRP Composite Structures""; ""8 ANALYSIS AND DESIGN OF SEMI-RIGID PULTRUDED FIBER-REINFORCED POLYMER FRAME CONNECTIONS""; ""8.1 Semi-Rigid Behavior of PFRP Connections""; ""8.2 Moment Rotation Relations (M/I?)""; ""8.3 Connection Stiffness Expressions""; ""8.4 Rigorous Analysis of PFRP Structures with Semi-Rigid Connections""

""8.5 Design of Semi-Rigid Bolted Frame Connections""
