
**SECTION 06 1123
LAMINATING ADHESIVES**

This Section specifies “Wilsonart® Adhesives produced by Wilsonart®. There is a wide range of contact adhesive and PVA-based adhesive selections available to meet any required lamination application. Wilsonart® is the largest and most-recognized manufacturer of laminate adhesives in the United States with a substantial presence in the global marketplace.

Wilsonart® Adhesives are well suited for a wide range of commercial, healthcare, educational, and residential applications. There is an adhesive for any project-related requirements, including flatwork, postforming, joint assembly, metal and wood substrates, and hard to bond surfaces. The laminating adhesives product line exhibit outstanding bond strength.

Wilsonart® Adhesives are sustainably responsible, and contribute to LEED v4.1 BD+C and ID+C points in several categories.

Section Editing: Informational notes will appear as “Editing Note” text boxes throughout this Section. Bracketed bold text will require a selection to be made or information to be inserted.

PART 1 GENERAL

1.01 SECTION INCLUDES

EDITING NOTE: Revise listing to suit Project requirements.

- A. Contact adhesives.
- B. Cold Press Polyvinyl Acetate (PVA) adhesives.
- C. Assembly/Hot/Cold Press Polyvinyl Acetate (PVA) adhesives.
- D. Postforming and Pinch Rolling Polyvinyl Acetate (PVA) adhesives.
- E. Melamine adhesives.
- F. Polyvinyl Acetate (PVA) Glues.

1.02 RELATED REQUIREMENTS

EDITING NOTE: Section listings below are common references and based on the broadly accepted CSI MasterFormat® for Section numbers and titles. Revise to suit requirements for particular project.

- A. Section 01 3000 - Submittals.
- B. Section 06 0620 - Decorative Plastic Laminate.
- C. Section 06 0630 - Decorative Plastic Laminate Resurfacing.
- D. Section 06 4116 - Plastic-Laminate-Clad Architectural Cabinets.
- E. Section 08 1423.16 - Plastic-Laminate-Faced Wood Doors.

- F. Section 10 2113.16 - Plastic-Laminate-Clad Toilet Compartments.
- G. Section 12 3530.13 - Kitchen Casework.
- H. Section 12 3623.13 - Plastic-Laminate-Clad Countertops.

1.03 REFERENCES

EDITING NOTE: Revise Reference Standards to suit Project requirements.

- A. Reference Standards:
 - 1. ASTM: ASTM International.
 - 2. ASTM D4236: Standard Practice for Labeling Art Materials for Chronic Health Hazards.
 - 3. ASTM D4317: Standard Specification for Polyvinyl Acetate-Based Emulsion Adhesives.
 - 4. CARB: California Air Resources Board.
 - 5. LEED[®]: Leadership in Energy and Environmental Design[™].
 - 6. NAUF: No Added Urea-Formaldehyde.
 - 7. OTC: Ozone Transport Commission.
 - 8. SCAQMD: South Coast Air Quality Management District.
 - 9. SCAQMD Rule 1168: Adhesive and Sealant Applications.
 - 10. UL: Underwriters Laboratories.
 - 11. UL 2818: GREENGUARD Certification Program for Low Chemical Emissions for Building Materials, Finishes and Furnishings.
 - 12. WDMA: Window & Door Manufacturers Association.
 - 13. WDMA TM-6: Test Method for Determining the Durability of Adhesives Used in Doors Under Accelerated Aging Conditions.
 - 14. WIC: Woodwork Institute of California.

1.04 SUBMITTALS

- A. Submit under provisions of Section 01 3000 - Submittals.
- B. Product Data: Submit the following:
 - 1. Product data for each specified product. Include manufacturer's technical data sheets and published instructions.
 - 2. Safety Data Sheets (SDS).
- C. Shop Drawings: Fully dimensioned shop drawings showing layouts and components, including edge conditions, joinery, terminating conditions, substrate construction, and cutouts and holes. Include elevations, section details, and large-scale details. Indicate color, pattern, and finish selections.
- D. Samples: Selection and verification samples for each color, pattern, and finish required.
- E. Quality Assurance Submittals:
 - 1. Test Reports: Certified test reports showing compliance with specified performance characteristics and physical properties, if required.
 - 2. LEED Submittals: Applicable LEED documentation for potential credits specified in this Section.

- 3. Certificates: For GREENGUARD compliant adhesives.
- F. Maintenance Data: Manufacturer's published maintenance manual with closeout submittals.

1.05 REGULATORY REQUIREMENTS

- A. SCAQMD Rule 1168: Adhesive and Sealant Applications.
- B. CARB: Current California Air District Rules and Regulations.
- C. OTC: Model Rule for Adhesives and Sealants.

1.06 QUALITY ASSURANCE

EDITING NOTE: Following LEED paragraph list potential credits according to LEED v4.1.1 for BD+C: New Construction and Major Renovation and LEED v4.1.1 for ID+C: Commercial Interiors. Coordinate with designated Project LEED AP for credits applicable to Project.

- A. LEED v4.1 rating system potential credits for adhesives:
 - 1. Indoor Environmental Quality: Construction Indoor Air Quality Management Plan.
 - 2. Low-Emitting Materials: VOC content data.
 - 3. Low-Emitting Materials: Product data verifying no added urea-formaldehyde (NAUF) resins.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Storage and Protection: Store materials protected from exposure to harmful weather conditions, at temperature and humidity conditions recommended by manufacturer.

1.08 PROJECT CONDITIONS

- A. Environmental Requirements: Ensure substrates and adhesives are at temperatures above 65 deg F (18 deg C) prior to application. Apply adhesives between 70 deg F (21 deg C) and 85 deg F (29 deg C).

PART 2 - PRODUCTS

WILSONART CONTACT INFORMATION: Wilsonart, 2501 Wilson Center, Temple, TX 76503-6110. Tel. 254.207.7000, Toll-Free 800.433.3222, Fax 254.207.3209.
Website: www.wilsonart.com

2.01 MANUFACTURER

- A. Basis of Design: Wilsonart.

EDITING NOTE: Refer to the Wilsonart website for complete information on adhesive properties, including applicable sustainable design conformance standards, compliance with additional standards, and physical performance properties.

2.02 CONTACT ADHESIVES

- A. Product: "WA-1900 Flat Lay Spray-Grade Contact Adhesive."
1. Description: California-compliant, low VOC, solvent-based contact adhesive. Spray-applied.
 2. Bonding Applications: Flatwork (non-postforming).
 3. Physical Properties: 78 g/Liter VOC content. 35.5 percent solids content.
 4. Application Limitations: Avoid the following:
 - a. Copper or copper alloy substrates.
 - b. Surfaces with dirt, grease, or excessive moisture.
 - c. Vinyl surfaces with plasticizers detrimental to proper bonding.
 5. Sustainable Design Attributes:
 - a. Specified LEED v4.1 credits.
 - b. UL 2818 GREENGUARD Certified.
 - c. OTC compliance.
 - d. SCAQMD Rule 1168 compliance.
- B. Product: "H₂O Water-Based Contact Adhesive."
1. Description: Non-flammable water-based contact adhesive. Spray, brush, or roller applied.
 2. Bonding Applications: Postforming and flatwork.
 3. Physical Properties: Less than 0.1 g/Liter VOC content. 52.0 percent solids content.
 4. Conformance Standard: WIC Type II Adhesive.
 5. Application Limitations: Avoid the following:
 - a. All non-stainless steel substrates.
 - b. Surfaces with dirt, grease, or excessive moisture.
 - c. Vinyl surfaces with plasticizers detrimental to proper bonding.
 - d. Low pressure melamine surfaces.
 - e. Polyester or painted surfaces.
 6. Sustainable Design Attributes:
 - a. Specified LEED v4.1 credits.
 - b. UL 2818 GREENGUARD Certified.
 - c. OTC compliance.
 - d. SCAQMD Rule 1168 compliance.

2.03 COLD PRESS POLYVINYL ACETATE (PVA) ADHESIVES

- A. Product: "3100 PVA Adhesive."
1. Description: Emulsion of water, starch, and PVC.
 2. Bonding Applications: Glue spread/cold press lamination.
 3. Physical Properties: Less than 20 g/Liter VOC content. 43.0 percent solids content.

4. Application Limitations: Avoid the following:
 - a. Tempered hardboard, fire-retardant-treated or moisture-retardant-treated board products.
 - b. Wheatboard or strawboard.
 - c. Low pressure melamine surfaces, polyester, metal or painted surfaces.

 5. Sustainable Design Attributes:
 - a. Specified LEED v4.1 credits.
 - b. UL 2818 GREENGUARD Certified.
 - c. OTC compliance.
 - d. SCAQMD Rule 1168 compliance.
- B. Product: "3105 PVA Adhesive."
1. Description: Emulsion of water, starch, and PVC.
 2. Bonding Applications: Glue spread/cold press lamination.
 3. Physical Properties: Less than 20 g/L VOC content. 45.0 percent solids content.
 4. Application Limitations: Avoid the following:
 - a. Tempered hardboard, fire-retardant-treated or moisture-retardant-treated board products.
 - b. Wheatboard or strawboard.
 - c. Low pressure melamine surfaces, polyester, metal or painted surfaces.

 5. Sustainable Design Attributes:
 - a. Specified LEED v4.1 credits.
 - b. UL 2818 GREENGUARD Certified.
 - c. OTC compliance.
 - d. SCAQMD Rule 1168 compliance.
- C. Product: "3116 PVA Adhesive."
1. Description: Emulsion of water, starch, and PVC.
 2. Bonding Applications: Glue spread/cold press laminations.
 3. Physical Properties: Less than 20 g/L VOC content. 43.0 percent solids content.
 4. Application Limitations: Avoid the following:
 - a. Tempered hardboard, fire-retardant-treated or moisture-retardant-treated boards.
 - b. Wheatboard or strawboard.
 - c. Low pressure melamine surfaces, polyester, metal or painted surfaces.

 5. Sustainable Design Attributes:
 - a. Specified LEED v4.1 credits.
 - b. UL 2818 GREENGUARD Certified.
 - c. OTC compliance.
 - d. SCAQMD Rule 1168 compliance.

- D. Product: "3117 PVA Adhesive."
1. Description: Emulsion of water, starch, and PVC.
 2. Bonding Applications: Glue spread/cold press laminations.
 3. Physical Properties: Less than 20 g/L VOC content. 43.0 percent solids content.
 4. Application Limitations: Avoid the following:
 - a. Tempered hardboard, fire-retardant-treated or moisture-retardant-treated boards.
 - b. Wheatboard or strawboard.
 - c. Low pressure melamine surfaces, polyester, metal or painted surfaces.
 5. Sustainable Design Attributes:
 - a. Specified LEED v4.1 credits.
 - b. UL 2818 GREENGUARD Certified.
 - c. OTC compliance.
 - d. SCAQMD Rule 1168 compliance.

2.04 ASSEMBLY/HOT/COLD PRESS POLYVINYL ACETATE (PVA) ADHESIVES

- A. Product: "3125 Water-Resistant PVA Adhesive."
1. Description: Emulsion of water and PVC.
 2. Bonding Applications: Joint assembly and hot/cold press laminations.
 3. Physical Properties: Less than 20 g/L VOC content. 53.0 percent solids content.
 4. Conformance Standard: ASTM D4317 Type II Classification.
 5. Application Limitations: Avoid the following:
 - a. Tempered hardboard and fire-retardant-treated boards.
 - b. Low pressure melamine, metallic painted, polyester surfaces and where Type I waterproof adhesive is required.
 6. Sustainable Design Attributes:
 - a. Specified LEED v4.1 credits.
 - b. UL 2818 GREENGUARD Certified.
 - c. OTC compliance.
 - d. SCAQMD Rule 1168 compliance.
- B. Product: "3131 PVA Adhesive."
1. Description: Emulsion of water, starch, and PVC.
 2. Bonding Applications: Glue spread hot/cold press laminations.
 3. Physical Properties: Less than 20 g/L VOC content. 62 percent solids content.
 4. Application Limitations: Avoid the following:
 - a. Tempered hardboard, fire-retardant-treated or moisture-retardant-treated boards.
 - b. Wheatboard or strawboard.
 - c. Low pressure melamine surfaces, polyester, metal or painted surfaces.

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5. Sustainable Design Attributes:
- a. Specified LEED v4.1 credits.
 - b. UL 2818 GREENGUARD Certified.
 - c. OTC compliance.
 - d. SCAQMD Rule 1168 compliance.
- C. Product: "3132 PVA Adhesive."
1. Description: Emulsion of water, starch, and PVC.
 2. Bonding Applications: Glue spread hot/cold press laminations.
 3. Physical Properties: Less than 20 g/L VOC content. 58.0 percent solids content.
 4. Application Limitations: Avoid the following:
 - a. Tempered hardboard, fire-retardant-treated or moisture-retardant-treated boards.
 - b. Wheatboard or strawboard.
 - c. Low pressure melamine surfaces, polyester, metal or painted surfaces.
5. Sustainable Design Attributes:
- a. Specified LEED v4.1 credits.
 - b. UL 2818 GREENGUARD Certified.
 - c. OTC compliance.
 - d. SCAQMD Rule 1168 compliance.
- D. Product: "3135OV PVA Flexible Veneer Adhesive."
1. Description: Emulsion of water, starch, and PVC.
 2. Bonding Applications: Glue spread hot/cold press laminations.
 3. Physical Properties: Less than 20 g/L VOC content. 57.0 percent solids content.
 4. Conformance Standards: WDMA TM-6 for Type I and Type II wood flush door adhesives. ASTM D4317 Type II Classification.
 5. Application Limitations: Avoid the following:
 - a. Tempered hardboard products.
 - b. Low pressure melamine surfaces, polyester, metal or painted surfaces.
 6. Sustainable Design Attributes:
 - a. Specified LEED v4.1 credits.
 - b. UL 2818 GREENGUARD Certified.
 - c. OTC compliance.
 - d. SCAQMD Rule 1168 compliance.
- E. Product: "3140 PVA Adhesive."
1. Description: Emulsion of water, starch, and PVC.
 2. Bonding Applications: Glue spread hot/cold press, and pinch rolling laminations.
 3. Physical Properties: Less than 20 g/L VOC content. 45 percent solids content.
 4. Application Limitations: Avoid the following:
 - a. Tempered hardboard, fire-retardant-treated or moisture-retardant-treated boards.
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- b. Wheatboard or strawboard.
 - c. Low pressure melamine surfaces, polyester, metal or painted surfaces.
 - 5. Sustainable Design Attributes:
 - a. Specified LEED v4.1 credits.
 - b. UL 2818 GREENGUARD Certified.
 - c. OTC compliance.
 - d. SCAQMD Rule 1168 compliance.
- F. Product: “3310 PVA Adhesive.”
- 1. Description: Emulsion of water, starch, and PVC.
 - 2. Bonding Applications: Glue spread cold press laminations. Suitable for non-copper and non-ferrous metal bonding to board substrates.
 - 3. Physical Properties: Less than 20 g/L VOC content. 63.0 percent solids content.
 - 4. Application Limitations: Avoid the following:
 - a. Tempered hardboard, fire-retardant-treated board, moisture-retardant-treated board products.
 - b. Low pressure melamine surfaces, polyester, or painted surfaces.
 - 5. Sustainable Design Attributes:
 - a. Specified LEED v4.1 credits.
 - b. UL 2818 GREENGUARD Certified.
 - c. OTC compliance.
 - d. SCAQMD Rule 1168 compliance.

2.05 POSTFORMING AND PINCH ROLLING POLYVINYL ACETATE (PVA) ADHESIVES

- A. Product: “3000 PVA Adhesive.”
- 1. Description: Emulsion of water and PVC.
 - 2. Bonding Applications: Glue spread hot/cold press, glue spread/pinch roller, and postforming laminations. Also for use with spray applications.
 - 3. Physical Properties: Less than 20 g/L VOC content. 58.0 percent solids content.
 - 4. Application Limitations: Avoid the following:
 - a. Tempered hardboard, fire-retardant-treated boards, and moisture-retardant-treated board products.
 - b. Low pressure melamine, metallic painted, polyester surfaces and where waterproof adhesive is required.
 - c. Liner grade laminate to plywood.
 - 5. Sustainable Design Attributes:
 - a. Specified LEED v4.1 credits.
 - b. UL 2818 GREENGUARD Certified.
 - c. OTC compliance.
 - d. SCAQMD Rule 1168 compliance.

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- B. Product: "3001 PVA Adhesive."
1. Description: Emulsion of water and PVC.
 2. Bonding Applications: Glue spread hot/cold press, glue spread/pinch roller, and postforming laminations. Also for use with spray applications.
 3. Physical Properties: Less than 20 g/L VOC content. 58.0 percent solids content.
 4. Application Limitations: Avoid the following:
 - a. Tempered hardboard, fire-retardant-treated boards, and moisture-retardant-treated board products.
 - b. Low pressure melamine, metallic painted, polyester surfaces and where waterproof adhesive is required.
 - c. Liner grade laminate to plywood.
 5. Sustainable Design Attributes:
 - a. Specified LEED v4.1 credits.
 - b. UL 2818 GREENGUARD Certified.
 - c. OTC compliance.
 - d. SCAQMD Rule 1168 compliance.
- C. Product: "3004 PVA Adhesive."
1. Description: Emulsion of water and PVC.
 2. Bonding Applications: Glue spread hot/cold press, glue spread/pinch roller, and postforming laminations. Also for use with spray applications.
 3. Physical Properties: Less than 20 g/L VOC content. 58.0 percent solids content.
 4. Application Limitations: Avoid the following:
 - a. Tempered hardboard, fire-retardant-treated boards, and moisture-retardant-treated board products.
 - b. Low pressure melamine, metallic painted, polyester surfaces and where waterproof adhesive is required.
 - c. Liner grade laminate to plywood.
 5. Sustainable Design Attributes:
 - a. Specified LEED v4.1 credits.
 - b. UL 2818 GREENGUARD Certified.
 - c. OTC compliance.
 - d. SCAQMD Rule 1168 compliance.
- D. Product: "3035 PVA Adhesive."
1. Description: Emulsion of water and PVC. For postform edge applications.
 2. Bonding Applications: Glue spread/hot press and postforming laminations. Also for use with spray applications.
 3. Physical Properties: Less than 20 g/L VOC content. 55.0 percent solids content.
 4. Application Limitations: Avoid the following:
 - a. Tempered hardboard, fire-retardant-treated boards, and moisture-retardant-treated board products.
 - b. Low pressure melamine, metallic painted, polyester surfaces and where waterproof adhesive is required.
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5. Sustainable Design Attributes:
 - a. Specified LEED v4.1 credits.
 - b. UL 2818 GREENGUARD Certified.
 - c. OTC compliance.
 - d. SCAQMD Rule 1168 compliance.

2.06 MELAMINE ADHESIVES

- A. Product: "3300 Melamine Adhesive."
 1. Description: Acrylic-based adhesive.
 2. Bonding Applications: Non-porous materials to wood and composite surfaces including melamine, vinyl, high pressure laminate, PVC, wood veneer, metal, stone, tile and acrylics.
 3. Physical Properties: 7 g/L VOC content. 57.0 percent solids content.
 4. Application Limitations: Avoid the following:
 - a. Tempered hardboard, fire-retardant-treated boards, and moisture-retardant-treated boards.
 - b. Low pressure melamine, metallic painted, polyester surfaces and where waterproof adhesive is required.
 5. Sustainable Design Attributes:
 - a. Specified LEED v4.1 credits.
 - b. UL 2818 GREENGUARD Certified.
 - c. OTC compliance.
 - d. SCAQMD Rule 1168 compliance.
- B. Product: "Lokweld Melamine Adhesive."
 1. Description: Acrylic-based adhesive.
 2. Bonding Applications: Non-porous materials to wood and composite surfaces including melamine, vinyl, high pressure laminate, PVC, wood veneer, metal, stone, tile and acrylics.
 3. Physical Properties: 7 g/L VOC content. 57.0 percent solids content.
 4. Application Limitations: Avoid the following:
 - a. Exterior use or application where moisture is present.
 5. Sustainable Design Attributes:
 - a. Specified LEED v4.1 credits.
 - b. UL 2818 GREENGUARD Certified.
 - c. OTC compliance.
 - d. SCAQMD Rule 1168 compliance.

2.07 POLYVINYL ACETATE (PVA) GLUES

- A. Product: "10 All Purpose Glue."
 1. Description: Emulsion of water and PVC.
 2. Bonding Applications: Glue spread/cold press wood-to-wood applications.
 3. Physical Properties: Less than 20 g/L VOC content. 45.0 percent solids content.

4. Conformance Standard: ASTM D4236.
 5. Application Limitations: Avoid the following:
 - a. Tempered hardboard, fire-retardant-treated boards, and moisture-retardant-treated board products.
 - b. Low pressure melamine, metallic painted, polyester surfaces and where waterproof adhesive is required.
 6. Sustainable Design Attributes:
 - a. Specified LEED v4.1 credits.
 - b. UL 2818 GREENGUARD Certified.
 - c. OTC compliance.
 - d. SCAQMD Rule 1168 compliance.
- B. Product: "20 Yellow Wood Glue."
1. Description: Emulsion of water and PVC.
 2. Bonding Applications: Joint assembly and bonding decorative laminate to wood products. Cold press laminating applications.
 3. Physical Properties: Less than 20 g/L VOC content. 47.0 percent solids content.
 4. Application Limitations: Avoid the following:
 - a. Tempered hardboard, fire-retardant-treated boards, and moisture-retardant-treated board products.
 - b. Low pressure melamine, metallic painted, polyester surfaces and where waterproof adhesive is required.
 5. Sustainable Design Attributes:
 - a. Specified LEED v4.1 credits.
 - b. UL 2818 GREENGUARD Certified.
 - c. OTC compliance.
 - d. SCAQMD Rule 1168 compliance.
- C. Product: "30 Yellow Wood Glue."
1. Description: Emulsion of water and PVC.
 2. Bonding Applications: Joint assembly and bonding decorative laminate to wood products. Cold press laminating applications.
 3. Physical Properties: Less than 20 g/L VOC content. 47.0 percent solids content.
 4. Application Limitations: Avoid the following:
 - a. Tempered hardboard, fire-retardant-treated boards, and moisture-retardant-treated board products.
 - b. Low pressure melamine, metallic painted, polyester surfaces and where waterproof adhesive is required.
 5. Sustainable Design Attributes:
 - a. Specified LEED v4.1 credits.
 - b. UL 2818 GREENGUARD Certified.
 - c. OTC compliance.
 - d. SCAQMD Rule 1168 compliance.

- D. Product: "Lokweld White Wood Glue."
1. Description: Emulsion of water and PVC.
 2. Bonding Applications: Joint assembly and bonding decorative laminate to wood products. Hot/cold press laminating applications.
 3. Physical Properties: Less than 20 g/L VOC content. 49.0 percent solids content.
 4. Conformance Standards: ASTM D4317 Type II Classification and ASTM D4236.
 5. Application Limitations: Avoid the following:
 - a. Tempered hardboard, fire-retardant-treated boards, and moisture-retardant-treated board products.
 - b. Low pressure melamine, metallic painted, polyester surfaces and where waterproof adhesive is required.
 6. Conformance Standard: ASTM D4317 Type II Classification and ASTM D4236.
 7. Sustainable Design Attributes:
 - a. Specified LEED v4.1 credits.
 - b. UL 2818 GREENGUARD Certified.
 - c. OTC compliance.
 - d. SCAQMD Rule 1168 compliance.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine substrates and conditions that could adversely affect the work of this Section.
- B. Substrates to be bonded must be sound, flat, smooth, and free from dust, loose paint, wax, moisture, dirt, grease, oil, rust or other surface contaminants.
- C. Commencement of work will constitute acceptance of existing conditions and substrates to receive the work.

3.02 INSTALLATION

- A. Precondition surfacing materials and surfaces to receive surfacing materials according to manufacturer's printed installation instructions.
- B. Spray Applications: Comply with adhesive manufacturer's printed installation instructions, including coverage rate and drying time. Use only approved application equipment, including spray applicators.
- C. Glue Spreader Applications: Comply with adhesive manufacturer's printed installation instructions.
- D. Hand Applications: Comply with adhesive manufacturer's printed installation instructions.

3.03 CLEANING AND PROTECTION

- A. Clean bonded surfaces according to manufacturer's published care and maintenance instructions. Use only manufacturer recommended solvents.
- B. Protect completed work from damage for remainder of construction period.

3.04 SCHEDULE

OPTION: Schedule may be inserted here if this option is chosen.

END OF SECTION 06 1123