

PART 1 — GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the contract, including general and supplementary conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following waterproof vertical grade panel and solid plastic trim product types:
 - 1. Commercial Wall Panels [full height and wainscoting].
 - 2. Vertical Surfacing for Fixtures and Displays.
 - 3. Wall Panel Installation Systems and Panel Moldings.
 - 4. Solid Polymer Architectural Moldings.
 - 5. Adhesives Specially Formulated for Recycled Polymer Adhesion.
 - 6. Sealants Specially Formulated For Recycled Polymer Adhesion.
- B. Related Sections include the following:
 - 1. Parkland™ NRP® LEED applicability: see section 1.4 E. LEED submittals. Manufacturer's product content statement available upon request.
 - 2. Division 6 Section "Solid Surface Fabrications".

1.3 DEFINITION

- A. Parkland NRP panels are defined as waterproof, nonporous sheet maintaining the same composition throughout the part with a composition of densified polymer alloy, reclaimed polymer materials, mineral reinforcement, pigment and high-performance additives, meeting applicable building materials standards; NEMA, UL, ANSI, ASTM, having minimum physical, performance, and environmental properties specified.
- B. Appearance: Colored plastic sheet.
 - 1. Parkland NRP Panels, Non-Fiberglass Reinforced Plastic [sheet].

1.4 SUBMITTALS

- A. Product data:
 - 1. NRP Panels
- B. Installer instruction requirements:
 - 1. Show location of each item, dimensioned plans and elevations, large-scale details, attachment devices, seam locations, and other components prior to commencement of work.
 - a. Show locations and sizes of cutouts, and holes for fixtures, and other items installed in solid wall panels.
 - b. Show location of seams and panel moldings.
 - c. For notches and cut outs, leave minimum 1/4" smooth radius at all inside corners to distribute stress.

C. Samples:

- 1. For each type of product specified.
 - a. Manufacturer will supply minimum 4-inch by 4-inch sample in specified finish.
 - b. Cut sample and seam together for representation of manufacturer's seaming system.
 - i. Seam with divider molding, ii. Seam with silicone sealant, iii. Caulkless waterproof seam
 - c. Indicate full range of color and pattern variation.
- 2. Approved samples will be retained by manufacturer as a standard for work.
- D. Product data:
 - 1. Product description, fabrication information and compliance with specified performance requirements to be agreed upon prior to receipt of order.
 - 2. Product data: see also manufacturer's product documents.
 - i. Product Overview Guide, ii. Product Use & Care Guide, iii. Product Installation Instructions,
 - iv. Product installation video, v. Official product warranty
- E. LEED submittals:
 - 1. MR Credit 4.1 and 4.2 Materials and Resources:
 - a. NRP and Polywall™ panels contain minimum 80% pre-consumer waste by weight.
 - b. Panel weights for .060", .090", and .150" thicknesses are .4 Lb./ S.F., .5 Lb./ S.F., and .9 Lb/ S.F. respectively.
 - 2. MR Credit 5.1 and 5.2 Regional Materials:
 - a. Product origin: Middlebury, Indiana.



1.4 LEED SUBMITTALS (continued)

- E. LEED submittals (continued):
 - 3. IEQ Credit 4.1 Low Emitting Materials: Adhesives and Sealants.
 - a. Parkland™ NRP® panels contain no detectable VOC materials.
 - b. Manufacturer's specified adhesives are water-based, low-VOC content. MSDS sheet available upon request.
- F. Product certificates:
 - 1. Signed manufacturer's statement of compliance available upon request with each purchase order.
- G. Fabricator/installer qualifications:
 - 1. Installers receive corporate training and field experience. 1 Training Document/DVD ships with each order upon request.
- H. Other Product data:
 - 1. Use and Care Guide available upon request.
 - 2. Installation & Fabrication Guide available upon request.
 - 3. Product Overview Guide available upon request.
 - 4. MSDS
 - 5. See suggested project specification at the end of this document.

1.5 QUALITY ASSURANCE QUALIFICATIONS

- A. Installer qualifications:
 - 1. Work of this section shall be by a trained installer, receipt of training materials may be certified in writing by the manufacturer.
- B. Applicable standards:
 - 1. Standards of the following, as referenced herein:
 - a. American National Standards Institute (ANSI)
 - b. American Society for Testing and Materials (ASTM)
 - c. International Assoc. of Plumbing and Maintenance Officials (I.A.P.M.O.)
 - d. Underwriters Laboratories (UL)
 - e. National Electrical Manufacturers Association (NEMA)
 - f. National Association of Homebuilders (NAHB)
 - 2. Fire test response characteristics:
 - a. Provide with the following Class C (Class III), surface burning characteristics as determined by testing identical products per UL 723 (ASTM E84) or another testing and inspecting agency acceptable to authorities having jurisdiction:
 - 1) Flame Spread Index: 200 or less (Class III). 2) Smoke Developed Index: 450 or less (Class III).
 - b. For Class A (Class-I) required materials, see NRP-FR product information elsewhere.

1.6 DELIVERY, STORAGE AND HANDLING- Manufacturer will:

- A. Deliver no components to project site until areas are ready for installation.
- B. Store components indoors prior to installation.
- C. Handle materials to prevent damage to finished surfaces.

1.7 WARRANTY

- A. Provide manufacturer's warranty against defects in materials.
 - 1. Warranty shall provide material to repair or replace defective materials.
 - 2. Damage caused by physical or chemical abuse or damage from excessive heat or abrasion will not be warranted.
 - 3. Warranty shall be non-transferable to subsequent owners.
- B. Manufacturer's Warranty Period:
 - 1. Five years from date of purchase.

1.8 MAINTENANCE

- A. Routine and regular cleaning with soapy water.
- B. Removal of stains with common household cleansers, and a small amount of bleach solution in a rag for very stubborn stains.
- C. See NRP Use & Care Guide for more information.



PART 2 — PRODUCTS

2.1 MANUFACTURER

A. Parkland Plastics™
104 Yoder Drive
Middlebury, INDIANA
46540 USA
1-800-835-4110

2.2 MATERIAL PROPERTIES

A. Description:

1. Parkland™ NRP® panels are defined as waterproof, nonporous sheet maintaining the same composition throughout the part with a composition of densified polymer alloy, reclaimed polymer materials, mineral reinforcement, pigment and high-performance additives, meeting applicable building materials standards; NEMA, UL, ANSI, ASTM, having minimum physical, performance, and environmental properties specified.

B. Thickness:

- 1. Parkland NRP: .060" [1/16"], .090" [1/8"], .150" [3/16"] thick.
- 2. For .250" (1/4") and thicker NRP Sheet products, see NRP Thick Sheet Guides, and section 2.7 B. page 5.

C. Edge treatment:

- 1. Standard sheets, all thicknesses .060" [1/16"], .090" [1/8"], .150" [3/16"]: no edge treatment.
- 2. Shower-MAX™ brand tub & shower wall products: .150" [3/16"] thick- 1mm bevel.

D. Sheet size

- 1. Parkland NRP: 4' wide, with available length [height] of: 8', 10', 12'.
- 2. Shower-MAX 1/8" [.100"], and 3/16 [.150"] thick sheets available in special sheet sizes- see Shower-MAX product guide for more information.

E.. Performance characteristics:

ASTM E-84 [1]	Flame Spread	≤200
ASTM E-84 [1]	Smoke Developed Index	≤450
ASTM D-4060	Taber Abrasion (wear resistance)	.060 wear index
ASTM D-732 [1]	Shear Strength	2970 psi
ASTM D-696 [1]	Coefficient / Therm. Expansion	3.84 X 10-5in/in/°F
ASTM D-790 [1]	Flexural Modulus (psi)	90,460 +/- 2840 psi
ASTM D-3029 [1]	Gardner Impact	23°C 22.60 in. lb. -20°C 5.90 in. lb.
ASTM D-570 [1]	Water Absorption	0.055%
ASTM D-2240 [1]	Hardness	71 Shore D
ASTM D-792 [1]	Specific Gravity	1.15
ASTM D-649 [1]	Heat Distortion Temperature	51.30°C
ASTM D-256 [2]	Un-notched Izod Impact	7.02 +/- 0.21 ft lb/in
ASTM D-695 [2]	Compressive Strength	5293 psi
ASTM D-638 [2]	Elongation @ Ultimate (psi)	410 +/- 10%
ASTM D-638 [2]	Tensile Strength @ ultimate (psi)	1190 +/- 60 psi
ASTM D-882 [3]	Elongation @ Break (%)	555 +/- 1%
ASTM D-882 [3]	Tensile Strength @ Break (%)	2062 +/- 179 psi

^{1- 0.090&}quot; sheet thickness, 2- 0.100" sheet thickness, 3- 0.060" sheet thickness. NEMA results based on the NEMA LD 3-2000.



2.3 Government Approvals

- A. USDA compliant
- B. CFIA approved
- C. State of California Proposition 65 Compliant

2.4 Institutional Affiliations and Approvals

- A. National Association of Homebuilders (NAHB)- Complete stain testing results available (ASTM D-1308).
- B. Member- U.S. Green Building Council (USGBC).
- C. ASTM E-84 flame spread and smoke development results available.

2.5 Material Qualifications

- A. NRP® and Polywall™ scrap can be recycled as grade #5 material.
- B. Does not support the growth of mold, mildew, or bacteria.
- C. All products 100% fiberglass-free, VOC-free, PVC-free.
- D. Cleanability- Parkland NRP product guaranteed safe to be cleaned with:
- Soapy Water
- Mild Detergent Solutions
- Formula 409® All Purpose Cleaner
- Clorox® Clean-Up® Cleaner with Bleach
- Fantastik® Oxypower® Multi-Purpose Cleaner
- Clorox Green Works® Natural Bathroom Cleaner*
- Windex® Multi-Surface Cleaner with Vinegar
- Clorox® Anywhere® Hard Surface™ Daily Sanitizing Spray
- Kaboom® with OxiClean Stain Fighter
- Lysol® All Purpose Cleaner
- Bon Ami® All Purpose Cleaner

2.6 Accessories, Adhesives, and Sealant

- A. Panel-to-panel moldings, corner moldings, end cap moldings.
- B. Panel adhesives [All 100% VOC-free]:
 - 1. Spray-Lock™ spray aerosol non-VOC adhesive, UL listed (22 oz can).
 - 2. Parkland™ Panel Adhesive (trowel-grade, 2 & 5 gallon tub).
 - 3. Seal Bond® # 105 (10 oz. tube)
- C. Sealant: Parkland EcoTUFF™ Advanced Silicone Sealant (10 oz tube).
 - 1. Colors: White, Almond, Grey, Bronze, Black.

2.7 Product Availability: Manufacturer's standard available finishes & colors

A. Wall Panels for vertical surface protection.

	Product & Finish	White	Almond	Tan	Grey	Black	Décor*	Available Moldings	Fire Rating	Panel Size	Packaging & Weight
•	Matte										32 sq. ft./10# per pc.
.090.	Nu Matte				_	■ White		40 sq. ft./12.5# per pc.			
•	Silk			ū	ū		_	■ Almond □ Tan	Class-III	4' x 8' 4' x 10'	48 sq. ft./15# per pc.
	Cracked Ice					_	_	☐ Grey	Class-III	4' v 12'	32 sq. ft./16# per pc.
.060.	Nu Matte							☐ Black		40 sq. ft./20# per pc.	
•	Silk					_	_				48 sq. ft./24# per pc.

■ Stocked ☐ Special Order — Not Available *Décor-Series products feature multiple finish options



2.7 Product Availability: Manufacturer's standard available finishes & colors (continued)

B. Thick panels for fabrication, support, structural applications.

nels	Color	Panel Size 4'x8' 4'x10' 4'x12'	Finish	Construction	Packaging & Weight
ane	White				
	Almond				1/4" Thick – 40 Lbs. 3/8" Thick – 60 Lbs. 1/2" Thick – 80 Lbs.
hick	Tan		■ Matte □ Cracked Ice	Full Thickness Color	
-	Grey		- Clacked ice		5/8" Thick – 100 Lbs.
NRP	Black				1,000 #/ Crate
_	Décor*	Special Order		Custom Veneer	

■ Stocked □ Special Order — Not Available *Décor-Series products feature multiple finish options

PART 3 — EXECUTION [INSTALLATION PROCESS]

3.1 EXAMINATION

- A. Upon request, manufacturer will assist customer to examine substrates and conditions, with installer present for compliance with requirements for installation tolerances, and other conditions affecting performance of work.
- B. Installers to proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION: Installer shall:

- A. Install components plumb, level and rigid, scribed to adjacent finishes, leaving minimum 1/16" gaps at all surfaces and walls, fixtures and openings in accordance with approved specifications and product data.
 - Form field joints using manufacturer's recommended accessories, and seal joints with Parkland™ EcoTUFF™
 Advanced Silicone Sealant if specified.
 - 2. Cut and finish component edges to a smooth appearance and feel with ordinary tools and fine sandpaper.
 - 3. Carefully dress joints smooth, remove surface residue and clean entire surface.

3.3 REPAIR

- A. Repair to correct installed fixtures to specified condition or to replace damaged work, which cannot be repaired to architect's satisfaction.
 - 1. Parkland™ NRP® is repairable in some circumstances. See Use and Care Guide for more information.

3.4 CLEANING AND PROTECTION

- A. Keep components clean during installation, or clean and cover with protective covering.
- B. Remove excess adhesives, sealants and other stains.
- C. See section 2.5 for list of approved cleaning agents.

3.5 SCHEDULE

- A. Wall panel Installation:
 - NRP wall panels shall be installed in accordance with all guidelines and recommendations in Parkland NRP & FRP Installation Guide [available upon request].
 - 2. Panel moldings: Parkland solid polymer waterproof panel moldings where moldings as specified.
 - a. Divider molding [1-piece], b. Corner molding, c. Cap molding, d. Divider molding [deluxe 2-piece]
 - 3. Architectural Moldings. Parkland heavy-duty solid polymer protective architectural moldings are available for base, chair and crown applications.
- B. Wall panel seams:
 - 1. Use desired divider molding between panels.
 - Space all panels with 1/16" minimum spacing, and fit seams neatly and fill gaps with color-coordinated EcoTUFF™
 Sealant.
 - 3. Parkland waterproof seam kit.



3.5 SCHEDULE (continued)

- D. Adhesives: Parkland™ NRP® sheet are made from chemically inert recycled polymer materials. The chemically inert nature of these materials necessitates the use of specially formulated adhesives. Parkland strongly recommends the exclusive use of the following adhesives:
 - 1. Parkland™ Panel Adhesive (trowel application, 2 & 5 gallon tubs).
 - 2. Spray-Lock™ Aerosol adhesive (spray application, 22 oz. can).
 - 3. Seal Bond® # 105 (tube application, 10 oz. tube)
- E. Handrails & other accessories: Contact Parkland for more information on handrail and other wall protection systems.

ARCHITECT'S SPECIFICATION:

Wall Panel Specification:

Walls shall be covered with 100% waterproof mineral-reinforced densified polymer alloy panels of 1/8" [.090"] nominal thickness. Panels shall feature protective surface texture as specified below. Panel material shall be composed of no less than 80% recycled content by weight. All wall panel materials to be 100% fiberglass free, PVC-free, with no detectable VOC materials.

Wall panel adhesive shall be 100% VOC-free. Adhesive may be trowel grade, aerosol-type, or tube application. Any aerosol spray propellant shall be of medical grade only.

All joints and seams shall feature minimum gaps for expansion of 1/16", and use manufacturer's specified accessory moldings for all seams, corners, and edges.

Base moldings and chair rails shall be of solid mineral-filled recycled polymer construction of minimum 1/4" thickness and height as selected below.

Sealant shall be specially formulated for adhesion to recycled plastic sheet and provided by the approved panel manufacturer.

Parkland Plastics™ 104 Yoder Drive Middlebury, INDIANA 46540
Wall panel color to be:
Wall panel texture to be:
□ Cracked Ice Finish □ Nu Matte Finish □ Silk
$\ \square \ 4$ " solid polymer base molding $\ \square \ 6$ " solid polymer base molding
Sealant to be EcoTUFF™ silicone, color to be:

For more information call: 800.835.4110 • or Visit: www.parklandplastics.com

Countertop Magic®, Windex®, Formula 409®, Scotch-Brite®, Armor-All®, Clorox® Clean-Up®, Fantastik® Oxypower, Clorox Green Works®, Clorox® Anywhere®, Kaboom®, Lysol®, Bon Ami®, Spray-Lock™ and Seal Bond® are registered trademarks; Parkland Plastics™ makes no claim of affiliation to trademark holders.

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