



Product Name: WaveWorks Casegoods

Contents: Product Summary
Environmental Summary
Contributions to LEED - CI 3.0
Contributions to LEED - NC 2.2
Contributions to LEED - CI 2.0

Updated: September 2011

WaveWorks answers individual sensitivities for style, efficiency and comfort at every level of an organization. WaveWorks offers choices and pleases even the most discriminating tastes with a full range of desks, reception units, storage cabinets, conference solutions, tables, metal storage components, filing and bookcases.

This high-style, modular series is all about flexibility, offering countless configurations for your entire organization in wood, laminate, thermofoil, glass, metal or a combination of all. Multiple reconfiguration options and flexible add-ons make WaveWorks a cost-effective option for growing offices or any space that demands versatility with style.

For additional detailed environmental information, please review our ecoScorecardSM tool. A fast and free web-based tool, it is a way to evaluate and select products based on environmental characteristics. With quick calculations of how products contribute to LEED[®] and other green rating systems, you can easily create the documentation necessary for environmental rating system applications. Visit www.NationalOfficeFurniture.ecoScorecard.com or click on the ecoScorecardSM logo to browse our extensive offering of green products.



WaveWorks Metal Components meet level[®] 2 certified by SCS to the ANSI/BIFMA e3 Standard.
WaveWorks Veneer and Laminate Casegoods meet SCS Indoor Advantage[™].



Green product information made simple
NationalOfficeFurniture.ecoScorecard.com

WaveWorks® Product Summary

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Worksurfaces

Most worksurfaces are sized on 6" increments for easy planning. Laminate worksurfaces are 1 3/16" or 1 9/16" thick. Choose from a 3mm softened PVC rim available in 15 colors, a 3mm reed PVC rim available in 7 woodgrains, or veneer edge available in 9 wood finishes and softened, cove, reed, zip, step and concave profiles. Thermofoil worksurfaces are 1 3/16" thick with softened edge on user side only. Veneer surfaces are 1 3/16" or 1 9/16" slipmatched Cherry or Maple veneer or bookmatched Walnut veneer. Wood rims are shaped on all sides with one of six rim options.

Chassis

All joints are securely fastened by screws, dowels and fasteners to ensure maximum strength. Adjustable floor levelers are standard on all casegoods. Modesty panels are full height and are 3/4" thick. End panels and support panels are 1 1/2" thick.

Drawer Pulls

Nantucket, Malibu, Laguna and Newport Pulls
Available in Platinum Metallic, Satin Nickel Metallic, Anthracite Metallic or Cinder

Marina, Boca, Triangle, Crescent, Bar and Allure Pulls
Available in Platinum Metallic or Cinder

Balance, Sweep, Groove, Summit and Spiral Pulls
Available in Satin Nickel Metallic or Anthracite Metallic

Keen Pull
Available in Satin Nickel

Beam, Curved, Elongated and Level Pulls
Available in Silver or Black

Drawer Interiors

Drawers feature five-sided construction allowing for easy removal of drawer fronts. Sides, backs and front are woodgrain vinyl wrapped, 1/2" thick. Drawer fronts are three ply construction with matched woodgrain.

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Drawer Suspensions

File drawers are equipped with black, full extension, progressive action slides. Box drawers in wood or laminate units are equipped with full extension slides with ball bearing rollers while metal units are equipped with 3/4 extension slides. Precision steel ball bearings combined with sequence slide movement ensures long lasting operation.

Filing Hardware

Heavy duty file rods in file drawers are designed to accommodate various filing requirements. No-tool, easy installation allows for quick interchangeable filing capabilities.

Cord Management

Plastic round black grommets and zinc racetrack grommets in Satin Nickel Metallic, Platinum Metallic, Anthracite Metallic and Cinder are optional in worksurfaces. Optional wire/data managers are available for additional cable management requirements.

Locking

Locking is standard in all pedestals, wall mount cabinets, storage units and wardrobe units. Locks are independent, face mounted with black finish. Removable lock cores allow for units to be easily rekeyed.

Antimicrobial

Antimicrobial Silver Ion protection is standard on all wood finishes and at no upcharge. Inhibiting the growth of stain and odor causing bacteria, such as E.coli and Staph, as well as other microbes, silver ion technology provides a continuous protective antimicrobial surface. The antimicrobial silver ion technology infused into our wood finish inhibits bacterial growth by 99.94%, keeping surfaces cleaner, longer.

Testing

National's casegoods meet or exceed the criteria outlined in the ANSI/BIFMA x5.5-2008 Desk/Table testing protocol. Testing is conducted in the Kimball International Testing and Calibration Lab, which is accredited by the American Association of Laboratory Accreditation.

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Our Sustainability Statement and Commitments

At National, we aim to create lasting stakeholder value through responsible growth and deep commitment to the well-being of future generations. We cherish the earth's natural resources and hold sustainability and environmental protection as our key priorities.

As our company fulfills its responsibilities to our customers, shareholders, employees and the public, six commitments provide a framework for focusing our energies toward the greatest good:

- Product Stewardship
- Green Building Development
- Social Accountability
- Environmental Preservation
- Regulatory Compliance
- Economic Responsibility

Manufacturing

National manufacturing facilities are registered to the ISO 14001 standard. This management tool enables us to identify and control the environmental impact of our operations, continually improve our company's environmental performance and systematically set environmental objectives and demonstrate their achievement.

Product Longevity

Our products are meant to last. They are backed by a Limited Lifetime Warranty, which assures they will be in use for many years. National products are designed to support end-of-life reuse and recycling efforts. To this end, disassembly instructions with recycled content information are available for your convenience.

Product Certifications

WaveWorks Veneer Casegoods – SCS Indoor Advantage™ and level® 3 certified by SCS to the ANSI/BIFMA e3 Standard.
WaveWorks Laminate Casegoods – SCS Indoor Advantage™ Gold and level® 3 certified by SCS to the ANSI/BIFMA e3 Standard.
WaveWorks Laminate Worksurfaces – SCS Indoor Advantage™ Gold and level® 3 certified by SCS to the ANSI/BIFMA e3 Standard.
WaveWorks Thermofoil Worksurfaces – SCS Indoor Advantage™ Gold and level® 3 certified by SCS to the ANSI/BIFMA e3 Standard.
WaveWorks Metal Components – SCS Indoor Advantage™ Gold and level® 2 certified by SCS to the ANSI/BIFMA e3 Standard.
WaveWorks Veneer Table Tops – SCS Indoor Advantage™ and level® 3 certified by SCS to the ANSI/BIFMA e3 Standard.
WaveWorks Laminate and Thermofoil Table Tops – SCS Indoor Advantage™ Gold and level® 3 certified by SCS to the ANSI/BIFMA e3 Standard.

Certificates are located at www.sccertified.com.

LEED Contribution

National products contribute to LEED credits in a variety of areas.

Please reference the LEED sheets for specific information.

WaveWorks® Contributions to LEED® – CI 3.0

Product Name: WaveWorks Casegoods
LEED Rating System: Commercial Interiors 3.0
September 2011



National products can contribute directly to individual LEED points in certain circumstances. However, in other cases our products simply help meet the overall intent. Use the following information as part of a comprehensive strategy to obtain LEED certification for a project.

Energy & Atmosphere	EA Credit 1.1	Optimize Energy Performance - Lighting Power <i>National's furniture can be provided with energy efficient task lighting which can assist in reducing the energy consumption for your building.</i>	1-5 Points
Materials & Resources	MR Credit 2	Construction Waste Management <i>National's packing materials are 100% recyclable, and our casegoods pack contains an average of 60% recycled content while our seating pack contains an average of 50% recycled content.</i>	1-2 Points
	MR Credit 3.2	Materials Reuse, Furniture and Furnishings <i>National's products are designed for durability with a Limited Lifetime Warranty and can be reused on many building projects, which can contribute to this point on future projects. WaveWorks modular components can also be easily reconfigured for reuse.</i>	1 Point
	MR Credit 4	Recycled Content <i>WaveWorks (Veneer, Laminate, Combo, Thermofoil) recycled content: 1.7% Post, 80.6% Pre = 82.3% Total LEED Contribution = 42%</i> <i>WaveWorks (Metal) recycled content: 0% Post, 25% Pre = 25% Total LEED Contribution = 12.5%</i>	1-2 Points
	MR Credit 5	Regional Materials <i>National's WaveWorks Product may contribute to this point depending on the project location. WaveWorks Veneer and Laminate are manufactured in Santa Claus, Indiana. WaveWorks Metal is manufactured in Post Falls, Idaho.</i>	1-2 Points
	MR Credit 7	Certified Wood <i>FSC-Certified wood based material available upon request.</i>	1 Point

WaveWorks® Contributions to LEED® – CI 3.0

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Indoor Environmental Quality	IEQ Credit 4.5	Low-emitting Materials - Systems Furniture (including Casegoods) and Seating	1 Point
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WaveWorks Assembled – Veneer and Veneer/Laminate Combo are certified to SCS Indoor Advantage™.
WaveWorks Assembled – Laminate is certified to SCS Indoor Advantage™ Gold.
WaveWorks Components – Laminate worksurfaces, Thermofoil worksurfaces and Metal are certified to SCS Indoor Advantage™ Gold.
WaveWorks Components – Veneer worksurfaces, Veneer/Laminate Combo, Veneer storage, Laminate storage, Veneer modesty and supports, and Laminate modesty and supports are certified to SCS Indoor Advantage™.
Certificates are located at www.scscertified.com.

	IEQ Credit 6.1	Controllability of Systems, Lighting	1 Point
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National's accessory task lighting offering will contribute to this credit by enabling adjustments for your occupants.

Innovation in Design	ID Credit 1	Innovation in Design	1-5 Points
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Innovation points may be achieved when a project exceeds a LEED CI performance credit.
Example: Exceeding the recycled content credit MR 4.
WaveWorks Products – Veneer, Laminate and Veneer/Laminate Combo are level® 3 certified by SCS to the ANSI/BIFMA e3 Standard, while Metal is level® 2 certified by SCS.
Certificates are located at www.scscertified.com.
WaveWorks meets the ergonomic guidelines of ANSI/BIFMA GI-2002 and ANSI/HFES 100-2007 when used with National's Adjustable Keyboard Kit.
The USGBC is currently piloting a credit for Life Cycle Assessment (LCA) of Building Assemblies and Materials for LEED NC (does not include furnishings). An LCA that conforms to ISO 14040 has been completed for WaveWorks. Thus, clients may want to consider submitting this for a potential innovation credit. Cover letter by a third-party reviewer can be located at www.NationalOfficeFurniture.com/Sustainability

Note: The USGBC will decide if the submission merits an innovation credit.

Regional Priority	RP Credit 1	Regional Priority	1-4 Points
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RP credits provide an incentive for the achievement of credits that address geographically specific environmental priorities.
Priority credits and their geographical applicability are available on the USGBC website, <http://www.usgbc.org/>.
National products may contribute regional priority credits based on the project location.

Product Name: WaveWorks Casegoods
LEED Rating System: New Construction 2.2
September 2011



National products can contribute directly to individual LEED points in certain circumstances. However, in other cases our products simply help meet the overall intent. Use the following information as part of a comprehensive strategy to obtain LEED certification for a project.

Energy & Atmosphere	EA Credit 1	Optimize Energy Performance <i>National's furniture can be provided with energy efficient task lighting which can assist in reducing the energy consumption for your building.</i>	1-10 Points
Materials & Resources	MR Credit 2.1	Construction Waste Management: Divert 50% from Landfill <i>National's packing materials are 100% recyclable, and our casegoods pack contains an average of 60% recycled content while our seating pack contains an average of 50% recycled content.</i>	1 Point
	MR Credit 2.2	Construction Waste Management: Divert 75% from Landfill <i>National's packing materials are 100% recyclable, and our casegoods pack contains an average of 60% recycled content while our seating pack contains an average of 50% recycled content.</i>	1 Point
	MR Credit 3.1	Materials Reuse, 5% <i>National's products are designed for durability with a Limited Lifetime Warranty and can be reused on many building projects, which can contribute to this point on future projects. WaveWorks modular components can also be easily reconfigured for reuse.</i>	1 Point
	MR Credit 3.2	Materials Reuse, 10% <i>National's products are designed for durability with a Limited Lifetime Warranty and can be reused on many building projects, which can contribute to this point on future projects. WaveWorks modular components can also be easily reconfigured for reuse.</i>	1 Point
	MR Credit 4.1	Recycled Content: 10% (Post-consumer + ½ Pre-consumer) <i>WaveWorks (Veneer, Laminate, Combo, Thermofoil) recycled content: 1.7% Post, 80.6% Pre = 82.3% Total WaveWorks LEED Contribution = 42%</i> <i>WaveWorks (Metal) recycled content: 0% Post, 25% Pre = 25% Total WaveWorks LEED Contribution = 12.5%</i>	1 Point
	MR Credit 4.2	Recycled Content: 20% (Post-consumer + ½ Pre-consumer) <i>WaveWorks (Veneer, Laminate, Combo, Thermofoil) recycled content: 1.7% Post, 80.6% Pre = 82.3% Total WaveWorks LEED Contribution = 42%</i>	1 Point
	MR Credit 7	Certified Wood <i>FSC-Certified wood based material available upon request.</i>	1 Point

WaveWorks® Contributions to LEED® – NC 2.2

Product Name: WaveWorks Caseloads
LEED Rating System: New Construction 2.2
September 2011



National products can contribute directly to individual LEED points in certain circumstances. However, in other cases our products simply help meet the overall intent. Use the following information as part of a comprehensive strategy to obtain LEED certification for a project.

Indoor Environmental Quality	EQ Credit 6.1	Controllability of Systems, Lighting	1 Point
		<i>National's accessory task lighting offering will contribute to this credit by enabling adjustments for your occupants to suit individual task needs.</i>	

Innovation in Design	ID Credit 1.1-1.4	Innovation in Design	1-4 Points
		<p>Innovation points may be achieved when a project exceeds a LEED NC performance credit.</p> <p><i>Example: Exceeding the recycled content credit MR 4.2</i></p> <p><i>WaveWorks Products – Veneer, Laminate and Veneer/Laminate Combo are level® 3 certified by SCS to the ANSI/BIFMA e3 Standard, while Metal is level® 2 certified by SCS.</i></p> <p><i>WaveWorks Products are certified to SCS Indoor Advantage™ and SCS Indoor Advantage™ Gold. This certification may support an ID credit for installing low-emitting furniture in your new building.</i></p> <p><i>Certificates are located at www.scs-certified.com.</i></p> <p><i>WaveWorks meets the ergonomic guidelines of ANSI/BIFMA GI-2002 and ANSI/HFES 100-2007 when used with National's Adjustable Keyboard Kit.</i></p> <p><i>The USGBC is currently piloting a credit for Life Cycle Assessment (LCA) of Building Assemblies and Materials for LEED NC (does not include furnishings). An LCA that conforms to ISO 14040 has been completed for WaveWorks. Thus, clients may want to consider submitting this for a potential innovation credit. Cover letter by a third-party reviewer can be located at www.NationalOfficeFurniture.com/Sustainability</i></p> <p>Note: The USGBC will decide if the submission merits an innovation credit.</p>	

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LEED Rating System: Commercial Interiors 2.0
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Energy & Atmosphere	EA Credit 1.1	Optimize Energy Performance <i>National's furniture can be provided with energy efficient task lighting which can assist in reducing the energy consumption for your building.</i>	1-3 Points
Materials & Resources	MR Credit 2.1	Construction Waste Management: Divert 50% from Landfill <i>National's packing materials are 100% recyclable, and our casegoods pack contains an average of 60% recycled content while our seating pack contains an average of 50% recycled content.</i>	1 Point
	MR Credit 2.2	Construction Waste Management: Divert 75% from Landfill <i>National's packing materials are 100% recyclable, and our casegoods pack contains an average of 60% recycled content while our seating pack contains an average of 50% recycled content.</i>	1 Point
	MR Credit 3.3	Resource Reuse, 30% Furniture and Furnishings <i>National's products are designed for durability with a Limited Lifetime Warranty and can be reused on many building projects, which can contribute to this point on future projects. WaveWorks modular components can also be easily reconfigured for reuse.</i>	1 Point
	MR Credit 4.1	Recycled Content: 10% (Post-consumer + ½ Pre-consumer) <i>WaveWorks (Veneer, Laminate, Combo, Thermofoil) recycled content: 1.7% Post, 80.6% Pre = 82.3% Total LEED Contribution = 42%</i> <i>WaveWorks (Metal) recycled content: 0% Post, 25% Pre = 25% Total LEED Contribution = 12.5%</i>	1 Point
	MR Credit 4.2	Recycled Content: 20% (Post-consumer + ½ Pre-consumer) <i>WaveWorks (Veneer, Laminate, Combo, Thermofoil) recycled content: 1.7% Post, 80.6% Pre = 82.3% Total LEED Contribution = 42%</i>	1 Point
	MR Credit 5.1	Regional Materials, 20% Manufactured Regionally <i>National's WaveWorks Product may contribute to this point depending on the project location. WaveWorks Veneer and Laminate is manufactured in Santa Claus, Indiana. WaveWorks Metal is manufactured in Post Falls, Idaho.</i>	1 Point
	MR Credit 7	Certified Wood <i>FSC-Certified wood based material available upon request.</i>	1 Point

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Indoor Environmental Quality	EQ Credit 4.5	Low-emitting Materials <i>WaveWorks Assembled – Veneer and Veneer/Laminate Combo are certified to SCS Indoor Advantage™.</i> <i>WaveWorks Assembled – Laminate is certified to SCS Indoor Advantage™ Gold.</i> <i>WaveWorks Components – Laminate worksurfaces, Thermofoil worksurfaces and Metal are certified to SCS Indoor Advantage™ Gold.</i> <i>WaveWorks Components – Veneer worksurfaces, Veneer/Laminate Combo, Veneer storage, Laminate storage, Veneer modesty and supports, and Laminate modesty and supports are certified to SCS Indoor Advantage™.</i> <i>Certificates are located at www.scs-certified.com.</i>	1 Point
	EQ Credit 6.1	Controllability of Systems, Lighting <i>National's accessory task lighting offering will contribute to this credit by enabling adjustments for your occupants.</i>	1 Point
Innovation in Design	ID Credit 1.1-1.4	Innovation in Design Innovation points may be achieved when a project exceeds a LEED CI performance credit. <i>Example: Exceeding the recycled content credit MR 4.2</i> <i>WaveWorks Products – Veneer, Laminate and Veneer/Laminate Combo are level® 3 certified by SCS to the ANSI/BIFMA e3 Standard, while Metal is level® 2 certified by SCS.</i> <i>Certificates are located at www.scs-certified.com.</i> <i>WaveWorks meets the ergonomic guidelines of ANSI/BIFMA GI-2002 and ANSI/HFES 100-2007 when used with National's Adjustable Keyboard Kit.</i> <i>The USGBC is currently piloting a credit for Life Cycle Assessment (LCA) of Building Assemblies and Materials for LEED NC (does not include furnishings). An LCA that conforms to ISO 14040 has been completed for WaveWorks. Thus, clients may want to consider submitting this for a potential innovation credit. Cover letter by a third-party reviewer can be located at www.NationalOfficeFurniture.com/Sustainability</i> Note: The USGBC will decide if the submission merits an innovation credit.	1-4 Points