



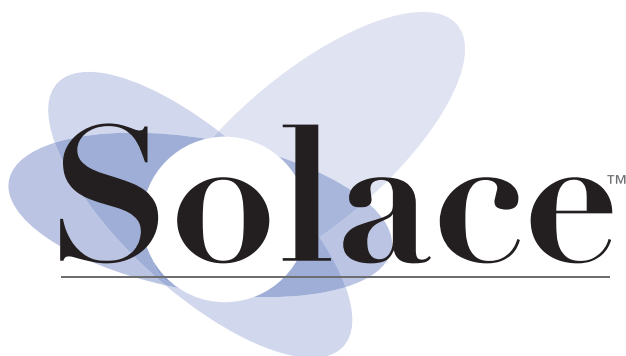
Yes, you can.®

microAIR®

BY INVACARE

Powered Replacement Systems

For more information, contact your Invacare Territory Business Manager at 1-800-333-6900 or visit our website at www.invacare.com



Therapeutic Foam Mattresses

For Invacare Foam Mattress solutions for pressure ulcer prevention and treatment, please refer to the Solace™ product catalog. 07-063

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Form No. 07-062
Rev. 11/07

All references to HCPCS codes:

Providers are responsible for determining the appropriate billing codes when submitting claims to the Medicare program, and should consult an attorney or other advisor to discuss specific situations in further details.



Yes, you can:

Therapeutic Support Surfaces

Powered Replacement Systems



microAIR®
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Invacare has a complete line of easy to understand and use microAIR® and Solace™ therapeutic surfaces. The innovative designs help in the prevention and treatment of pressure ulcers.



Invacare® Innovation Focused on Pressure Ulcers

Within 1-2 hours after blood flow is cut off, a pressure ulcer can form. Once symptoms appear, all concerned in the healthcare process are affected. An already ill or immobilized patient is more uncomfortable, and the caregiver is more emotionally drained.

A complex pressure ulcer is costly at an estimated \$70,000 to heal. The cost estimate to treat all pressure ulcers adds up to over \$1.5 billion each year* in the U.S. From a business standpoint, the reputation of the facility and the caregiver can be at risk. Apart from the financial cost, the emotional cost is

high as well. Adding to their time and physical challenges, caregivers must be even more attentive to the patient in checking and treating the ulcer, and turning the patient.

Many factors contribute to the occurrence of nosocomial pressure ulcers (pressure ulcers acquired in the home, hospital or facility). Invacare offers a complete line of static and dynamic therapeutic mattresses designed to help control some of the external factors that result in optimum pressure management.

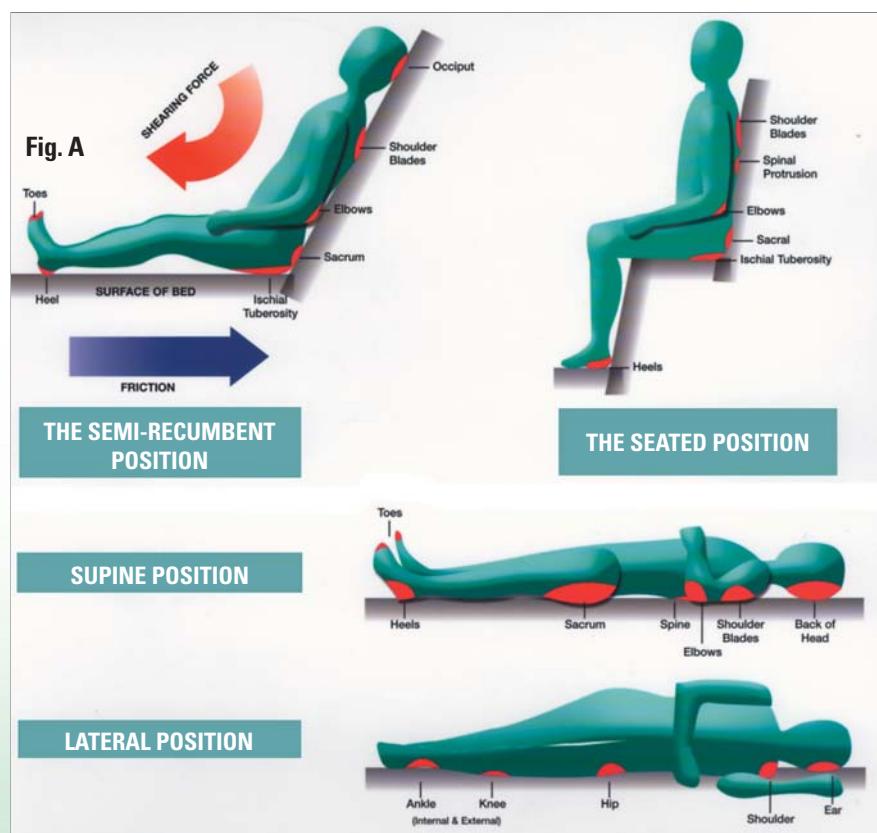
*The National Pressure Ulcer Prevalence Survey: A benchmarking approach, 1999.

Understanding Pressure Ulcers

What are pressure ulcers?

Pressure ulcers, sometimes called bed sores or decubitus (lying in bed) ulcers, are typically located in the areas where the body has less protective covering on weight bearing points. Those areas are typically heels, elbows, shoulders, and the sacral regions in the supine, semi-recumbent, and seated positions. Ankles, knees, hips and ears are additional areas of concern in the lateral position. (See Fig. A)

When the blood pressure is stopped or low (above 32mm/Hg) into the dermis, capillaries begin to close. (See Fig. B) Without the nutrients in the blood, and the removal of waste products, the area begins to break down. The first sign is redness and warmth to the touch. In severe stages, extensive tissue destruction can lead to tissue necrosis (death), and damage to supporting muscle and bone.



When is a patient at risk?

Patient risk is assessed on a number of factors standardized in assessments such as the Norton or Braden scales. It is recommended that patients be assessed as soon as possible upon entering into care. *This information is not medical advice. Each individual should always consult with his/her physician to determine proper product selection.*

What are the risk factors?

- 1. Patient is immobile or inactive.** The lack of movement results in loss of blood flow to the skin.
- 2. Body size and shape.** Very thin or very obese patients are at a higher risk. Very thin people lack cushioning between the skin and bony prominences such as heels and elbows. The overweight have fewer blood vessels to the skin and require body movement to get the blood flow to the susceptible areas.
- 3. Skin condition and hygiene regimens.** Thinning skin which naturally occurs with age, as well as some medications, may make the patient more susceptible.
- 4. Nutrition.** A balanced diet and proper calorie consumption is important in maintaining skin thickness and elasticity.
- 5. Incontinence and Infection.** Urine and fecal matter or increases in body temperature and subsequent perspiration can cause maceration (the skin to soften). The skin is therefore more susceptible to tearing.
- 6. Circulation.** Edema or swelling due to poor blood circulation makes the susceptible areas less resistant to pressure.

How do pressure ulcers form?

Any individual or combination of the above factors combined with environmental skin stress factors can result in a pressure ulcer. If the outer layer of skin (epidermis) is rubbed away the more vulnerable dermis layer is exposed to bacteria and infection.

- 1. Pressure.** When the capillary blood pressure is cut off from the skin by pressure on the area for an extended time.
- 2. Moisture.** Over-hydrated (macerated) skin is at higher risk of tearing or breaking down from moving or friction.
- 3. Shear.** Capillaries stretch and tear reducing the blood flow when the skin remains stationary against the bed linens as the surface moves.
- 4. Friction.** When the skin is pulled across a coarse surface and the outer protective layer (epidermis) is rubbed away.

MEDICARE CRITERIA*

Support surfaces may be static (non-powered, reactive) or dynamic (moveable active surface). A static surface is recommended if a patient can assume varying positions without bearing weight on a pressure ulcer. Dynamic surfaces are required if the patient cannot change positions without bearing weight on the pressure ulcer OR if the patient fully compresses the static support surface.

Group II Treatment

Group II surfaces may be covered if the patient meets the following criteria:

- 1. Multiple stage II pressure ulcers located on the trunk or pelvis.**

AND

- 2. Patient has been on a comprehensive ulcer treatment program** for at least the past month which has included the use of a Group I support surface, and ulcers have worsened or remained the same over the past month.**

OR

- 3. Large or multiple stage III or IV pressure ulcer(s) on the trunk or pelvis.**

OR

- 4. Recent myocutaneous flap or skin graft for a pressure ulcer on the trunk or pelvis (surgery within the past 60 days).**

AND

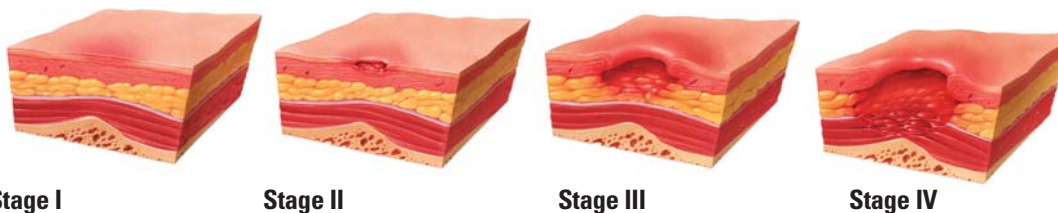
- 5. The patient has been on a group II or III support surface immediately prior to a recent discharge from a hospital or nursing facility (discharge within the past 30 days).**

* Medicare Criteria: This information is not intended to be, nor should it be considered, billing or legal advice. Providers are responsible for determining the appropriate billing codes when submitting claims to the Medicare program, and should consult an attorney or other advisor to discuss specific situations in further detail.

** Documented comprehensive care plan/treatment program should generally include: education for patient and caregiver on prevention/management of pressure ulcers; regular assessment by a licensed practitioner (weekly if stage 3 or 4, monthly if stage 1 or 2); turning and positioning schedule; appropriate wound care (stage 3 or 4); appropriate management of moisture/ incontinence; nutritional assessment and intervention.

Fig. B

Skin Layers
Subcutaneous soft tissue
Bone



Pre Stage I "Suspected Deep Tissue Injury" – Localized area of discolored (purple or maroon) intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear. The tissue may be painful, firm, mushy, warmer or cooler compared to adjacent tissue.

- I.** Non-blanchable erythema of intact skin. (Skin that does not turn white when depressed)

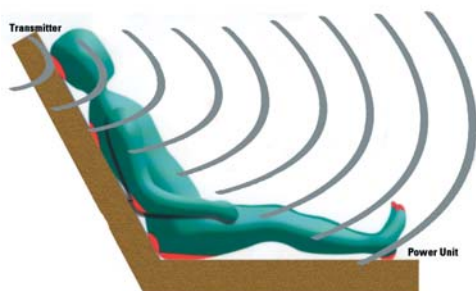
- II.** Partial thickness skin loss involving epidermis, dermis or both.
- III.** Full thickness skin loss involving damage or necrosis of subcutaneous tissue that may extend down to, but not through, underlying fascia.
- IV.** Full thickness skin loss with extensive destruction, tissue necrosis, or damage to muscle, bone, or supporting structures.

microAIR® Dynamic Pressure Relieving Mattresses

You've come to expect reliability from the Invacare® microAIR® brand, and with this new line of products. The innovation is unsurpassed at a price point that's attractive. New wireless fowler technology, real time pressure monitoring and energy conserving power units combine to make microAIR surfaces the most efficient dynamic support surfaces in the market.

Please review the full line of microAir products to understand more fully the exciting improvements.

Real Time Pressure Monitoring in Energy Efficient Technology



- Within the power units is a pressure transducer that maintains surface pressure not to exceed 32mm/Hg. (millimeters of mercury pressure)
- The solenoid valve within the compressor opens and closes the air valve automatically to maintain the pressure relief range prescribed.
- The compressor turns off to save energy when the patient is in the range.

Wireless Fowler Technology is an innovation exclusive that assures patient comfort. From time to time patients need to sit up in bed, which creates the problem of additional pressure in the coccyx area and possible disruption of treatment. Standard in the MA60, MA65, MA80, MA85, MA90Z and MA95Z products is a wireless fowler. Working in sync with the power unit, the transmitter installed in the head section of the mattress signals the power unit when the head portion begins to raise. The power unit immediately begins adding 25% more air to the mattress to prevent patient contact with a hard surface.



- 50 LPM compressor

The new microAir® 50, 60, 80 and 90 series are designed to offer good, better and best solutions in increased therapy modes for patients. The unique and patented designs of the power unit combine comfort and technology for patient relief and inspire caregiver confidence. The traditional Invacare® microAIR® 3500S™ and popular Turn-Q® Plus designs are available as well.

Invacare has also addressed the problems of accidental disconnection. The specially designed connectors are inset to help protect it from accidental dislodging when in use.

- The control panels have been designed with icons to provide easy, intuitive operation for caregivers



microAIR®
Alternating Pressure
Mattress and
Overlay

A good, cost effective, overlay system with a 10 LPM compressor offers pressure relief.

Invacare® microAIR® 50 Alternating Pressure overlay with 10 LPM

Model no. MA50

Economical alternating pressure is offered in the standard 36" x 80" size. This power mattress overlay has 16 five inch bladders covered in 70 denier quilted nylon for comfort. Treatment times are 5, 10, 15, and 20 minute cycles. The non-skid bottom is secured with elastic hold-downs. When rolled up for storage, carrying handles allow for easy transport.



• MA51 control panel

Invacare® microAIR® 51 Alternating Pressure with 10 LPM

Model no. MA51

Affordable with added comfort, this alternating pressure mattress is available in the standard 36" x 80" size. The mattress has a horizontal configuration of 16 six inch bladders and a 2" foam safety pad covered in 70 denier quilted nylon for comfort. Treatment times are 5, 10, 15, and 20 minute cycles. The mattress has a non-skid bottom and is secured with 10 nylon web buckled hold-downs. When rolled up for storage, carrying handles allow for easy transport.

Invacare® microAIR® 55 Alternating Pressure with 10 LPM

Model no. MA55

Affordable, alternating pressure and low air loss mattress replacements with six inch bladders. Available in standard 36" x 80" size with a waterproof anti-microbial cover.

- CPR release
- Non-skid bottom
- Nylon buckled hold-downs
- Carrying handles are standard

- 10 LPM compressor



microAIR® Alternating Pressure Models

microAIR® Alternating Pressure and Low Air Loss solutions for treatment



Horizontal bladder configuration improves therapy comfort.

CPR release

50 LPM Compressor Models

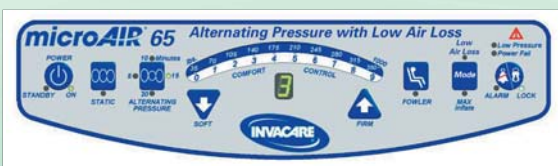
Invacare® microAIR® 60 Alternating Pressure with 50 LPM Compressor

Model no. MA60

The level of therapy improves with this affordable alternating pressure mattress and 50 LPM compressor. The mattress is made up of 20 eight inch bladders with a 2" foam safety pad. Alternating pressure cycles are adjustable to 5, 10, 15 and 20 minutes. A dual quilted top cover with a slip layer provides comfort and shear protection to delicate skin. Ten nylon web straps with buckled hold downs secure the mattress to the bed frame.

Invacare® microAIR® 65 Alternating Pressure and Low Air Loss with 50 LPM Compressor

Model no. MA65



- MA65 control panel

Building on the standard MA60 Alternating Pressure Product, this enhanced mattress replacement offers two modalities: alternating pressure and on-demand low air loss. The other features of 20 eight inch bladders, 2" safety foam pad, and 5,10,15, and 20 minute cycles are standard. A dual quilted top cover with slip layer, and 10 nylon web straps with buckled hold-downs to secure the mattress are included as well.

Blower Models

Invacare® microAIR® 80 True Low Air Loss Mattress with 1275 LPM Blower Unit

Model no. MA80



• MA80 control panel

This blower-powered product offers comfort and envelopment of the patient in 8" bladders, and the fast set-up inherent with a blower power unit. Air loss is 1275 LPM. The dual quilted top cover with slip layer, and 10 nylon web straps with buckled hold-downs to secure the mattress are standard on this model.

Invacare® microAIR® 85 Alternating Pressure and True Low Air Loss with 1275 LPM Blower Unit

Model no. MA85



• MA85 control panel

This blower-powered product offers comfort and envelopment of the patient in 8" bladders along with two treatment modalities – alternating pressure combined with true low air loss. The top cover is a dual-quilted cover with a slip layer, and the 10 nylon web straps with buckled hold-downs to secure the mattress are also standard on this model.

Invacare® microAIR® 3500S™

Invacare® microAIR® 3500S™ Low Air Loss System with Blower Unit

Model no. BB9572000

This air loss system has three zones of 9" deep cells for patient immersion and multiple patient comfort settings.



Unique Z-Cell Design Innovation



LATERAL ROTATION

The Z-cell bladder allows for gentle, subtle patient movement and pressure relief treatment. The unique design can inflate or deflate to angle the patient without abrupt movement. Only in the Invacare® microAIR® 90 series, the Z-cell gives superior control over patient alternating pressure and lateral rotation therapies.

Lateral Rotation Models

Invacare® microAIR® 90Z Lateral Rotation with Alternating Pressure and Low Air Loss - 50 LPM Compressor

Model no. MA90Z



• MA90Z control panel

Twenty 8" Z-cell bladders provide 30 degree turning motion for patients. Mattress includes 15" side bolsters and a 2" foam safety pad. Special quilted slip layer cover attaches to the bed frame securely with 10 nylon buckled hold-downs.

Invacare® microAIR® 95Z Lateral Rotation with Alternating Pressure and Low Air Loss - 1275 LPM Blower

Model no. MA95Z



• MA95Z control panel

Twenty 8" Z-cell bladders provide 45 degree turning motion for patients with respiratory ailments. Mattress includes 12" side bolsters and a 2" foam safety pad. Special quilted slip layer cover attaches to bed frame securely with 10 nylon buckled hold-downs.

Invacare® microAIR® Turn-Q® Plus Lateral Rotation with Low Air Loss-Blower

Model no. BB9612000

This lateral rotation mattress has true low air loss capacity at 1000 LPM as well as the ability to turn the patient up to 40 degrees in a lateral rotation motion. The turning intervals are 4, 8, 15, 30, 60, and 120 minutes.

All microAIR® products have a CPR release feature for quick deflate. All covers are low-friction, breathable, washable and antimicrobial. Products are compliant with 16 CFR 1633 and 16 CFR 1632 where applicable.



Group I Therapeutic Support Surfaces

	Gel Overlay	Alternating Pressure	Non-Powered				Non-Powered and Power Self Adjustable Alternating Pressure	Alternating Pressure
Model Name	Invacare® Gel Foam Mattress Overlay	CareGuard™ Alternating Pressure Pad System	Invacare® Egress EZ™ Mattress	Solace™ Prevention Dual Layer Foam Mattresses	Solace™ Therapy Tri-Layer Foam Mattresses	Solace™ Resolution Mattresses	Solace™ Crossover	microAIR® 50 - 5" Overlay
Model Number	IVCGFMO2	CG9701	MATTEZCA, MATTEZLTCA	SPS10XX SPS20XX SPS30XX	STS10XX STS20XX STS30XX	SRS10XX SRS20XX SRS30XX	E01536 (includes power unit)	MA50
HCPCS Code	E0185	E0181	E0184	E0184	E0184	E0184	E0277	E0277
Patient Risk Level	Low	Low	Medium-High	Low	Med-High	High-Risk & Therapy	Therapy	Therapy
Reimbursement Range*	\$38.20 - \$44.94	\$18.47 - \$21.73	\$24.57 /mo	\$24.57 /mo	\$24.57 /mo	\$24.57 /mo	\$645.46 - \$759.39	\$645.46 - \$759.37
Type of Therapy								
General Pressure Reduction	■	■	■	■	■	■	■	
Alternating Pressure		■					Alternating Pressure on Demand	
Air Loss								
Lateral Rotation								
Features								
Alarm Silence							■	■
Blower								
Built-in Side Supports	■		3" Hard side supports with hand holds	SPS20XX SPS30XX	■	■	■	
Comfort Settings		■						■
State of the Art Compressor							10 LPM	10 LPM
Cover	70 Denier nylon top 9 oz. tri-laminate vinyl bottom waterproof, vapor permeable	Latex free vinyl	70 Denier nylon top 11 oz. tri-laminate vinyl bottom waterproof, vapor permeable				70 Denier 4-way stretch top with super non-skid base and sewn in side straps	70 Denier quilted nylon 1000 Denier nylon bottom
Quick CPR Release	■	■					■	■
Fortress Cut Convolute Foam			■	■	■	■	■	
Fowler Indicator								■
Mattress Construction	Gel	Pads	Foam	Foam	Foam	Foam	Foam and air bladders	16 - 5" Bladders
Mattress Dimensions	34" x 77" x 3.5"	34" x 118" x 2.5"	36" x 80" x 6"	36" x 80" x 6"	36" x 80" x 6"	36" x 80" x 6"	36" x 80" x 6"	36" x 80" x 5"
Power Failure/Low Pressure Alarm							■	■
Quick Connect Coupler								■
Safety Mat 2" Foam								
Therapy Time Settings (min)		Adjustable					10	5, 10, 15, 20
Weight Capacity	250 lb.	250 lb.	350 lb.	350 lb.	350 lb.	350 lb.	650 lb.	350 lb.
Wireless Fowler								
Z Cell								
CFR Fire Safety Testing								
16 CFR 1632, 16 CFR 1633	■	Not required	■	■	■	■	■	Not required
Limited Warranty								
Mattress	6 months	30 days	5 year 7 year	5 year	5 year	5 year	5 year	2 year
Power Unit		1 year					1 year	1 year
Cover			1 year	1 year	1 year	1 year	1 year	1 year

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Group II Therapeutic Support Surfaces

Alternating Pressure		Alternating Pressure Low Air Loss			Low Air Loss		Lateral Rotation with Alternating Pressure and Low Air Loss		
microAIR® 51 Mattress	microAIR® 60 10" AP Mattress	microAIR® 55 AP/LAL	microAIR® 65 AP/LAL	microAIR® 85 True Low Air Loss AP	microAIR® 3500S™	microAIR® 80	microAIR® 90Z Turn/LAL	microAIR® 95Z Turn/LAL	microAIR® Turn-Q™ Plus
MA51	MA60	MA55	MA65	MA85	BB9572000	MA80	MA90Z	MA95Z	BB9612000
E0277	E0277	E0277	E0277	E0277	E0277	E0277	E0277	E0277	E0277
Therapy	Therapy	Therapy	Therapy	Therapy	Therapy	Therapy	Therapy	Therapy	Therapy
\$645.46 - \$759.39	\$645.46 - \$759.39	\$645.46 - \$759.39	\$645.46 - \$759.39	\$645.46 - \$759.39	\$645.46 - \$759.39	\$645.46 - \$759.39	\$645.46 - \$759.39	\$645.46 - \$759.39	\$645.46 - \$759.39
Type of Therapy									
■	■	■	■	■			■	■	
		On-demand	On-demand	True	True	True	On-demand	■	■
							30 degree Z cell	45 degree Z cell	40 degree Lateral Rotation
Features									
■	■	■	■	■	■	■	■	■	■
				1275 LPM	1000 LPM	1275 LPM		1275 LPM	1000 LPM
							15" Side bolsters	12" Side bolsters	
■	■	■	■	■	■	■	■	■	■
10 LPM	50 LPM	10 LPM	50 LPM				50 LPM		
70 Denier quilted nylon 1000 Denier nylon bottom	Dual quilted slip layer cover 1000 Denier nylon bottom	70 Denier quilted nylon 1000 Denier nylon bottom	Dual quilted slip layer cover 1000 Denier nylon bottom	Dual quilted slip layer cover 1000 Denier nylon bottom	70 Denier nylon, polyester under layer	Dual quilted slip layer cover 1000 Denier nylon bottom	Dual quilted slip layer cover 1000 Denier nylon bottom	Urethane 4-way stretch quilted top cover	Breathable while prohibiting moisture and microbe transmission
■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■			■
16 - 6" Bladders	20 - 8" Bladders	16 - 6" Bladders	20 - 8" Bladders	20 - 8" Bladders	3 - 9" Bladders	20 - 8" Bladders	24 - 8" Bladders	24 - 8" Bladders	8 Air tubes
36" x 80" x 8"	36" x 80" x 8"	36" x 80" x 8"	36" x 80" x 8"	36" x 80" x 10"	37" x 84" x 8.5"	36" x 80" x 10"	36" x 80" x 15"	36" x 80" x 15"	37" x 84" x 8"
■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■
5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20				10, 20, 30, 60	Custom	
250 lb.	1000 lb.	250 lb.	1000 lb.	1000 lb.	600 lb.	1000 lb.	1000 lb.	1000 lb.	600 lb.
	■		■	■		■	■	■	
							■	■	
CFR Fire Safety Testing									
■	■	■	■	■	■	■	■	■	Not required
Limited Warranty									
1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year	6 months
2 year	2 year	2 year	2 year	2 year	2 year	2 year	2 year	2 year	2 year
1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year