

# MICHELIN® Tires for Transit Buses



# Lease or Purchase — *We have a solution for you.*

## Stability

### handle split second maneuvers . . .

When navigating through heavy traffic with a high center of gravity, vehicle stability and handling are critical.

Stability starts at the heart of the tire. Our industry leading casing design helps provide for a wider footprint which helps to maintain high traction levels and to withstand lateral forces exerted by the significant load transfers of quick lane changes, highly crowned secondary roads and high speed turns.\*

The wide tread, application specific compounds and robust casing designs of MICHELIN® tires work together to help deliver the stability and handling both drivers and their passengers expect.

\*Exceeding the safe, legal speed limit is neither recommended nor endorsed.



## Mobility

### respond despite the weather . . .

- Transporting passengers is not a mission that is generally cancelled on account of rain, sleet or snow. In fact, the ability to respond is even more critical in severe weather conditions.
- MICHELIN bus tires have been engineered to deliver the traction needed to perform all year long. MICHELIN technology and application specific tread compounds are combined to help deliver our most durable, best performing transit tires.

## Retreadability

### maximize your casing investment . . .



Only Michelin Retread Technologies can boast the use of Michelin's new tire technology, proven tread designs and rigorous quality control. Each tire endures a 9-step process before it earns the right to be called a MICHELIN Retread. From the casing's arrival to its final hand inspection, each retread tire must conform to our demanding quality requirements before it earns the Michelin stamp of approval.

## Fuel Costs

### minimize a major operating expense . . .



The fuel saving advantage of MICHELIN® tires is the result of a sophisticated mix of tread and casing design, as well as complex rubber compounds that work together to help provide low rolling resistance while maintaining mileage and traction.

### **Get Additional Mileage, while Saving Fuel and Reducing the CO2 Emissions of your Transit Vehicle with one of our newest tires - the MICHELIN® X® INCITY™ Z.**

The MICHELIN® X® INCITY™ Z tire offers 20% additional mileage with its scrub resistant compound, wear resistant tread pattern and wide footprint – optimized specifically for urban bus conditions. It also offers extended casing life, with extra thick sidewalls – 20% thicker than the popular MICHELIN® XZU2® tire. The thicker sidewall provides strong protection against shocks.

In addition to long mileage and casing life, the MICHELIN X INCITY Z tire delivers outstanding fuel efficiency\* & low rolling resistance.

\* Based on industry standard rolling resistance testing of comparable tires or retreads. Actual results may vary, and may be impacted by many factors, to include road conditions, weather and environment, driver performance, etc.



# MICHELIN® X® INCITY™ Z TIRE



URBAN APPLICATIONS

Improved<sup>(1)</sup> mileage and durability in an all-position tire designed for the challenges of urban conditions.

## 20% Additional Mileage<sup>(2)</sup>

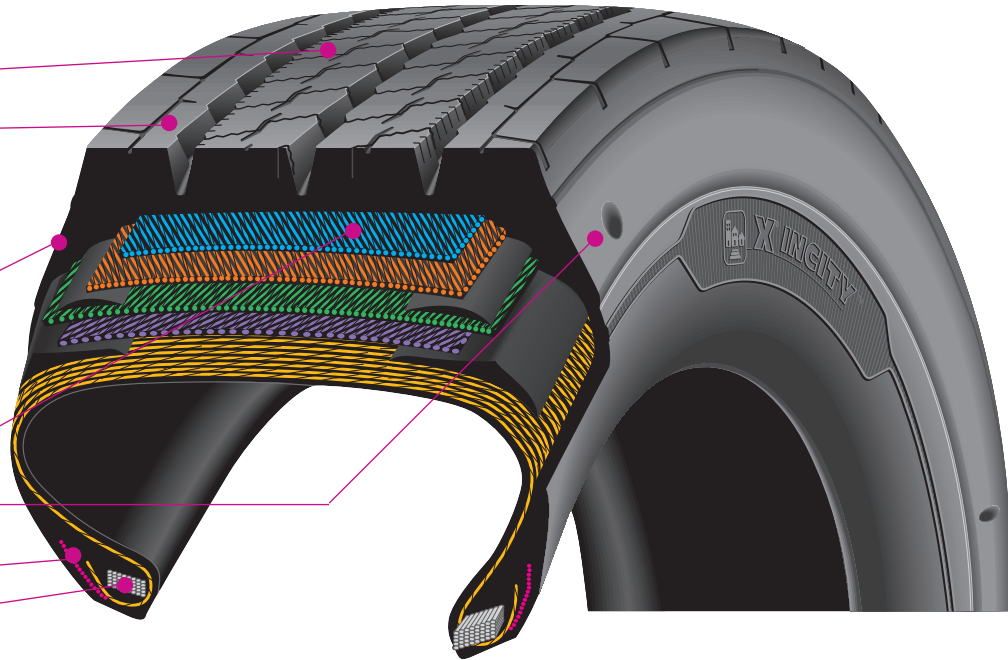
Longer tread life

- **Scrub Resistant Compound**  
Fights treadwear
- **Wear Resistant Tread Pattern**  
Optimized for urban bus conditions and for the reduction of irregular wear<sup>(2)</sup>
- **Wide Footprint**  
Distributes force for longer tread life

## Extended Casing Life

Improved casing protection and casing fatigue resistance

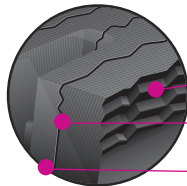
- **Extra Thick Sidewalls**  
20% thicker than MICHELIN® XZU®2 tire.  
Strong protection against shocks
- **Full Width Elastic Protector Ply**  
Michelin exclusive
- **Sidewall Wear Indicators**  
Promote timely tire rotation for long casing life and enhanced retreadability
- **Extended Metallic Chafer**  
Dissipates heat in bead area
- **Optimized Bead Architecture**  
Designed to improve bead durability



## Outstanding Fuel Efficiency

Low rolling resistance without compromising tread life

- **Optimized Design**  
Compounds and tread pattern combine to deliver outstanding fuel efficiency and mileage for urban applications

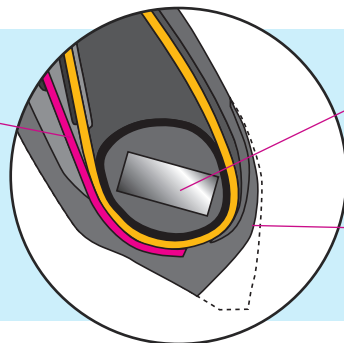


## Driver Confidence

Outstanding traction with *Matrix™* Siping

- **Matrix™ Sipes**  
Provide inter-locking action which offers excellent traction and even wear
- **Zig-Zag Groove Walls**  
Provide optimized biting edges and excellent water and snow evacuation
- **Full Depth Sipes**  
Provide excellent traction throughout the life of the tread

Improved retreadability and heat dissipation allowed through extra robust bead design featuring an elongated metallic chafer.



**Rectangular bead bundle** — a Michelin exclusive — simulates a solid steel rod “strapping” the tire onto the wheel. This design helps stabilize the entire bead region and minimizes fatigue in order to extend casing life.

**Reduced mounting and demounting damage** fostered with Michelin’s rounded bead toe design.

Note: Wheel listed first is the measuring wheel.

(1) Compared to MICHELIN® XZU®2 and XZU®3 tires.

(2) When compared to MICHELIN® XZU®2 (12R22.5) and XZU®3 (305/85R22.5) tires vs MICHELIN® X® INCITY™ Z tires (305/70R22.5) in direct comparison fleet testing.

MICHELIN® tires and tubes are subject to a continuous development program. Michelin North America, Inc. reserves the right to change product specifications at any time without notice or obligations. Please consult wheel manufacturer’s load and inflation limits. Never exceed wheel manufacturer’s limits without permission of component manufacturer.

# MICHELIN® TIRE SPECIFICATIONS


**X® INCITY™ Z**



- Delivers improved mileage\* and durability for the challenges of urban conditions
- 20% additional mileage\*\* delivered using a combination of a durable scrub resistant compound, a wear resistant tread pattern, and a wide footprint
- Casing life is extended with sidewalls that are 20% thicker vs. MICHELIN® XZU®2 tire
- Outstanding traction and handling comes from use of *Matrix™* Sipes
- 24/32nds original tread depth

\* Compared to MICHELIN® XZU®2 and XZU® tires.  
 \*\* When compared to MICHELIN® XZU®2 (12R22.5) and XZU®3 (305/85R22.5) tires vs MICHELIN® X® INCITY™ Z tires (305/70R22.5) in direct comparison fleet testing.

**XZA®2 ENERGY**



SmartWay Verified

- Optimized channel design allows for long tread life and minimized irregular wear
- Low rolling resistance compounds for fuel economy<sup>(1)</sup> in highway service
- Optimized for steer axle service
- 16/32nds, 17/32nds or 18/32nds original tread depth, depending on tread width

**XZE®**



- Solid shoulders to help resist scrub
- Curb guards on sidewalls
- Deep, wide tread
- Full depth siping for efficient traction
- Compounds for scrub resistance
- Groove bottom protectors help defend against stone drilling
- 17/32nds, 18/32nds, 19/32nds, 20/32nds, 21/32nds or 22/32nds original tread depth, depending on tread width

**XDN®2 / XDN®2 GRIP**




- All-weather highway drive tire
- *Matrix™* Sipes help deliver exceptional traction and excellent wear
- MICHELIN® XDN®2 GRIP is directional tread
- Wide open shoulder grooves help deliver additional traction balanced with tread life
- 27/32nds or 28/32nds original tread depth, depending on tread width

Size	Tread Design	Load Range	Catalog Number	Tread Depth		Max. Speed (*)		Loaded Radius		Overall Diameter		Overall Width (†)		Approved Rims (Measuring rim listed first.)		Dual Spacing		Revs Per Mile	Max. Load and Pressure Single				Max. Load and Pressure Dual			
				32nds	mph	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
12R22.5	XDN2	H	51753	27	75	20.0	508	42.9	1089	11.3	287	8.25, 9.00	13.2	335	483	7390	120	3350	830	6780	120	3075	830			
275/70R22.5 (2)	X INCITY Z	J	59714	21	65	17.7	453	38.1	969	11.4	289	8.25, 7.50	11.9	303	542	6940	130	3150	900	6395	130	2900	900			
305/70R22.5 (2)	X INCITY Z	L	02348	22	65	18.4	468	39.5	1003	12.3	312	9.00, 8.25	13.4	341	525	8047	130	3650	900	7385	130	3350	900			
305/85R22.5 (2)	X INCITY Z	J	36530	24	68	20.0	507	42.7	1085	11.7	298	9.00, 8.25	13.2	335	485	7830	120	3550	830	7160	120	3250	830			
315/80R22.5	XDN2	L	04355	28	75	20.0	507	43.1	1094	12.5	317	9.00, 8.25 (3)	13.8	351	486	9090	130	4125	900	8270	130	3750	900			

(1) Based on industry standard rolling resistance testing of comparable tires or retreads. Actual results may vary, and may be impacted by many factors, to include road conditions, weather and environment, driver performance, etc.  
 (2) "No bus shall be operated with regrooved, recapped or retreaded tires on the front wheels." US Code of Federal Regulations: Title 49, Transportation; Part 393.75.  
 (3) For use with 8.25 x 22.5 wheels, consult Michelin.  
 (\*) Exceeding the lawful speed limit is neither recommended nor endorsed.  
 (†) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.  
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# MICHELIN® RETREADS

**XZU®2 Pre-Mold™ Retread**




- Unique two compound design to help deliver long mileage and to help minimize internal casing temperatures
- Solid shoulder design optimized for long, smooth wear
- Fuel efficient compound to help contribute to greater fuel savings<sup>(1)</sup>
- 24/32nds tread depth

**XZE Pre-Mold™ Retread**



- Solid shoulders to help withstand scrub and abrasion
- Deep siping for optimized traction
- Deep tread depth designed for long mileage
- Available siped
- Also available as a Custom Mold™ retread
- 16/32nds or 18/32nds tread depth, depending on tread width

**XZU®S Pre-Mold™ Retread**



- More rubber mass to aid in scrub resistance
- Exclusive, unique two-layer compound designed to minimize internal casing temperatures for long tread & casing life
- Proprietary compound specifically formulated for demanding, high scrub operations
- 26/32nds tread depth

**XDN®2 Pre-Mold™ Retread**



- Exclusive, unique two-layer compound designed to minimize internal casing temperatures for longer tread & casing life
- Outstanding winter and wet traction utilizing Michelin's *Matrix™* Siping technology
- 27/32nds tread depth

(1) Based on industry standard rolling resistance testing of comparable tires or retreads. Actual results may vary, and may be impacted by many factors, to include road conditions, weather and environment, driver performance, etc.

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