

BRIDGESTONE



Truck Tire Construction



Tread “Cap”

For the part of the tread that touches the road, Bridgestone’s innovative two-layer design uses rubber specially compounded to deliver slow wear, long tread life and high traction.





Tread “Base”

Between the tread “cap” and the casing, Bridgestone uses a special cool-running rubber compound to insulate the casing from tread heat, saving fuel and improving retreadability.





Undertread

Special layer of tough rubber compounded by Bridgestone to protect belt package from penetrations while simultaneously providing a powerful bond between tread and casing.

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Mini-sidewalls

Specially compounded rubber is designed by Bridgestone to bond the tread rubber layers and the sidewall rubber compound, forming a solid connection between them.

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Belt edge inserts and fillers

Designed by Bridgestone to separate, orient and position the edges of belts for optimum effectiveness as support for the tread, while protecting belt cords from damaging mechanical stress.

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Belts

Bridgestone uses multiple belts with angled steel cords to create a foundation for the tread, pressing it flat against the road for slow, even wear, high traction and responsive handling.

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Transition Ply 1st Belt

The ply that forms the bridge between the flexible sidewall and the more stable crown area. The transition ply also assists in changing the profile of the tire from a more rounded shape to a “flatter” footprint.



Stabilizer Ply 2nd & 3rd Belts

These plies help to keep the tread in contact with the road. Improving the flat contact provides better traction and improved treadwear.

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Protector Ply 4th Belt

The protector ply is the last in the series of the belt package. It lies just above the stabilizer plies and just under the tread. It helps to protect the crucial working belts (stabilizer plies) from penetration injuries. Not all radial tires have protector plies.

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Innerliner

For defense against air loss, Bridgestone employs a liner of rubber with as many as three separate rubber layers and special additives to keep air inside the tire and away from the steel cords.

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Sidewalls

Bridgestone combines heat-resistant, highly resilient rubber – for solid control – with special additives to fight damage from oxygen, ozone and UV radiation from the sun.

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Casing Ply

Bridgestone embeds precisely aligned, high tensile strength steel cables in specially compounded rubber to create the architecture that gives “radial” tires their name.

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Soft bead filler

Designed by Bridgestone engineers to provide a strong, flexible, resilient junction between the relatively thin and flexible sidewalls and the much thicker, more rigid bead area.

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Hard bead filler

Bridgestone employs a thick, relatively stiff rubber compound to encase the bead bundle and position it tightly against the wheel flange – while minimizing flexing and movement.

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Bead bundle

Bridgestone coils tough, rubber-coated steel wire into continuous, hexagon-shaped rings that provide a rigid, yet resilient interface – and a tight seal – between the tire and wheel flange.

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Chafer

A layer of steel cords embedded in a special Bridgestone rubber compound wraps around the bead and body ply, helping to protect both from mechanical strain and abrasion.

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