

# Lets All Be Safe, Please

Before we get started.
You've got to register your
wheels or rims to activate
your warranty and make a
warranty claim (see the instructions in the Warranty
section).



forgeandbond.com/pages/support

Get on it.

#### In General

Knowledge and specific tools are necessary bicycle maintainence, repair and new equipment installation. For your safety, only a reputable bike shop should install, adjust, or service your bicycle and it's components. Ask your local bike shop if you have any questions or concerns about proper setup.

Swapping the components or parts on your bicycle can compromise the safety f your bicycle, void the warranty, and can result in injury and/or death. Not every component, part, or accessory, and in this case the F+B wheels and/or rims, have been tested for compatibility or safety on your bicycle. If there is any doubt, before making changes to your bicycle, check with your local bike shop.

#### Ridina

Keep an eye out for hazards while riding, such as parked cars, railroad tracks, potholes, cattle guards, debris, or changes in the road surface. These hazards can damage wheels, including specifically the F+B Product, and tires, or can cause you to lose control of the bicycle and crash, which might result in serious injury and/or death.

Product name: F+B 25 GR, F+B 30 EM  $\,$ 

Company name: FORGE+BOND

Postal address: 425 E 350 N, Gunnison, UT 84634

Contact information: +1 765 367 4311

contactaforgeandbond.com

# !! WARNING !!

#### Intended Use

FUSIONFIBER® carbon wheels (the "F+B Product") are only for use on bicycles. F+B Wheelsets with ebike specific designation in the F+B Product description are compatible for use on ebikes. Contact your local bike shop for assistance with regards to compatibility.

#### **General Warnings**

Riding your bicycle with an improperly secured wheel or axle can allow the wheel to move or disengage from the bicycle, and can cause a crash which, may result in serious injury and/or death.

Incorrectly installing an axle lever could cause the lever to get caught in the rotor of the disc brake or interfere with other componentry or the frame, which can cause you to crash and may result in serious injury and/or death.

A moving wheel is dangerous. Placing your hand or other parts of your body near a moving wheel can result in injury. The spokes or other parts of the wheel can catch your hand and crush them between the frame or other components. Do not place your hands or other parts of your body near a moving wheel.

Consult your local bike shop or refer to your axle manufacturer's instructions for proper wheel and axle installation information. The quick release clamp action shall emboss the frame or fork when locked, except on fiber reinforced plastics.

Ensure adherence to all torque and sizing specifications for press fits and thread fits. Over-tightening can result in damaged threads or cause parts to catastrophically fail. Using the wrong size part can cause part failure and can cause a crash which, may result in serious injury and/or death.

#### Wear & Tear and Damage

As with every mechanical component, the bicycle is subjected to high stress and wear. Materials and components, including those of the F+B Product, may react to wear or stress fatigue in different ways. If the usable life of the F+B Product has been exceeded, it may suddenly fail and may cause a crash, which can result in serious injury and/or death. Any signs of the following indicates that the life of the F+B Product may have been reached and it should be replaced: dents, cracks, scratching, delamination, unusual noise, or change of coloring, warping or any other suspect cosmetic or performance related issues.

Damage to the F+B Product may be invisible to the user, however in the event of an impact or crash, consult your local bike shop immediately for inspection. Your bicycle, including each of its components, requires regular maintenance, frequent inspection, and the replacement of parts to address any issues.

Do not exceed 150°F (65°C) exposure to your F+B Product. It's possible for high temperatures to occur inside an automobile, or if you position the F+B Product near an open flame or other heat sources or too close to an automobile exhaust. Any of these conditions, or similar/comparable conditions, may compromise the polymer matrix that holds carbon fibers together or that holds the F+B Product together.

Excessive vibration may indicate excessive imbalances of the F+B Product and this needs immediate and serious attention. In this event, stop riding the bike immediately and consult your local bike shop/dealer.

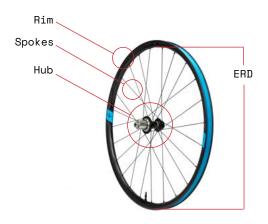
Clean the F+B Product with warm water and a soft towel.

## Intended Use

FORGE+BOND wheels are only for use on bicycles. The Rim Size Designation is comprised of two numbers, the Rim Bead Seat Diameter and the Inner Rim Width, reference the below chart. Use these two numbers to determine the correct tire compatibility for your rim.

Rim Model	Wheel Size	ASTM Classification:	ISO/Etro Rim Bead Seat Designation
F+B 30 EM 28H	29"	All Mountain/Enduro: Condition 4, downhill grades on rough trails at speeds less than 40	622-30C
29" 30 EM 32H	29"	km/h (25 mph), or both. Jumps are intended to be less than 122 cm (48 in.).	622-30C
F+B 25 GR 24h	700c	All Road/Gravel: Condition 2, unpaved and gravel roads and trails with moderate grades. Contact with irregular terrain and loss of tire contact with the ground may occur. Drops are intended to be limited to 15 cm (6 in.) or less.	622-25C

# **Wheel Parts & Measurements**



## Wheel Installation

Bicycles come with various brands and models of axles. You may have a different style of axle included on your bicycle. Consult your local bike shop for help with identifying which axle types are on your bicycle. Axle technologies and standards can change quickly. Refer to your axle manufacturer's instructions for the most current wheel and axle installation procedure.

Do not ride your bicycle with an improperly secured wheel or axle. An improperly secured wheel can move or be disengaged from the bicycle, and these scenarios can cause you to crash, which may result in serious injury and/or death.

Incorrect installation or placement of an axle lever might cause the lever to get caught in the rotor of the disc brake or interfere with the frame or other components, which can cause a crash which, may result in serious injury and/or death.

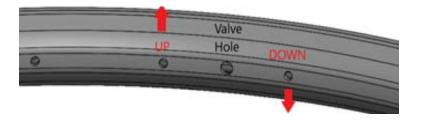
## **Rims**

Improperly installed rim tape or valves can prevent the tire from seating in the rim, cause the tire to come off the rim, or cause a flat tire, which can cause a crash which, may result in serious injury and/or death.

Special knowledge and tools are necessary for installation and adjustment of bicycle components and aftermarket bicycle supplies, including rim tape and valves. For your safety, only a reputable local bike shop should install rim tape. Make sure to set up a maintenance schedule witah your local bike shop to keep your bicycle safe and performing its best. Consult your local bike shop if you have any questions or concerns about proper setup. Stop riding immediately and consult your local bike shop if you suspect any problems with your bicycle.

# **Rim Specifications**

Rim Model	Wheel Size	Inner Rim Width (A)	Outer Rim Width (B)	Rim Depth (C)	ERD (mm)
29" 30 EM 28H	29"	30mm	38mm	22mm	594mm
29" 30 EM 32H	29"	30mm	38mm	22mm	594mm
700c 25 GR 24h	700c	25mm	31.4mm	25mm	592mm



## !! WARNING!!

# **Wheel Building & Spoke Replacement**

FORGE+BOND wheels should only be built by the most qualified and skilled wheel builders. Wheel building and spoke lacing should only be done by the most trained, skilled, and qualified wheel builders. Failure to correctly build wheels can lead to failure, which can cause a crash, serious injury and/or death.

Only use recommended spokes, spoke nipples, and ALWAYS use Sapim MG washers. FORGE+BOND wheels REQUIRE use of Sapim MG washers, OMMISION OF SAPIM MG WASHERS IN WHEEL BUILDS UNQUESTIONABLY VOIDS THE F+B PRODUCT WARRANTY. The numbers in the table provided are required for wheel building, such as Effective Rim Diameter (ERD) should only be, used by highly trained and skilled wheel builders. Refer to your hub manufacturer's instructions for hub specifications. All FORGE+BOND ERD specifications are listed INCLUDING MG washers already. Spoke length calculations should simply use the specified ERD, no need to adjust for washer use. The below listed wheel build specifications are critical for a properly functioning F+B Product.

The recommended spoke tension for FORGE+BOND FUSIONFIBER® Carbon Wheels is 120 kgf (+/-6 kgf) on the high-tension sides (brake side front, drive side rear). Low tension side (drive side front, brake side rear) is dependent on hub configuration and a resultant of centering the dish. It should fall between 90-110 Kgf average and should be kepth within (+/- 10 Kgf). FORGE+BOND rims can only be built with 3 cross or 2 cross style spoke lacing patterns. DO NOT BUILD WITH RADIAL PATTERN.

Nipples: Brass only, spherical head style nipples, below are approved compatible Sapim: Poluax. DoubleSauare.

DT Swiss: ProHead. Squorx Pro Head

For Reference, ALL F+B factory Wheel builds use Sapim Dbl-Square, Secure Lock, 2.0 x 16mm, Brass nipples

Washers: Sapim MG Washers REQUIRED FOR ALL BUILDS, NO DELETION OR SUBSTITUTION Failure to build FORGE+BOND rims with Sapim MG washers will void the Warranty. This wheel is designed as a system to work in conjunction with Sapim MG washers. They are required in order to function safely at maximum performance.

Spokes: Sapim or DTswiss spokes are highly recommended.

All FORGE+BOND rims are designed for use with 14G-2.0mm threaded double-butted style, Steel or Stainless Steel spokes

Compatible Sapim spokes: D-light, Race, CX-Ray, Laser

Compatible DT Swiss Spokes: Competition, Competition Race, Aero Comp FORGE+BOND RIMS ARE NOT COMPATIBLE WITH BERD OR OTHER STYLE FABRIC SPOKES

Failure to build FORGE+BOND rims with Sapim MG washers will void the Warranty. This wheel is designed as a system to work in conjunction with Sapim MG washers in order to function safely at maximum performance. The above listed specifications are critical for a properly functioning F+B Product.

# **Spoke Lengths**

Industry 9 Torch Road CL			Front Wheel Spoke Lengths		Rear Wheel Spoke Lengths	
Rim Model	Wheel Size	Lacing Pattern	Non-Drive Side	Drive Side	Non-Drive Side	Drive Side
F+B 25 GR 24h	700c	2 Cross	286mm	288mm	288mm	282mm

Industry 9 Hydra 6B, Boost			Front Wheel Spoke Lengths		Rear Wheel Spoke Lengths		
Rim Mo	del	Wheel Size	Lacing Pattern	Non-Drive Side	Drive Side	Non-Drive Side	Drive Side
F+B 30 E	M 28H	29"	3 Cross	294mm	296mm	294mm	292mm
F+B 30 E	M 32H	29"	3 Cross	288mm	292mm	288mm	290mm

Industry 9 Hydra CL, Boost			Front Wheel Spoke Lengths		Rear Wheel Spoke Lengths	
Rim Model	Wheel Size	Lacing Pattern	Non-Drive Side	Drive Side	Non-Drive Side	Drive Side
F+B 30 EM 28H	29"	3 Cross	294mm	296mm	294mm	292mm
F+B 30 EM 32H	29"	3 Cross	288mm	292mm	290mm	288mm

Industry 9 Hy	Rear Wheel Spo	ke Lengths		
Rim Model	Wheel Size	Lacing Pattern	Non-Drive Side	Drive Side
F+B 30 EM 28H	29"	3 Cross	294mm	292mm
F+B 30 EM 32H	29"	3 Cross	288mm	290mm

Industry 9 Hy	Rear Wheel Spo	ke Lengths		
Rim Model	Wheel Size	Lacing Pattern	Non-Drive Side	Drive Side
F+B 30 EM 28H	29"	3 Cross	296mm	292mm
F+B 30 EM 32H	29"	3 Cross	290mm	288mm

## **Tires**

## **NOTICE**

FORGE+BOND Rims are ISO/ETRTO TSS compatible rims, designed for tubeless tires. Only use Tubeless Ready or Compatible tires with F+B rims.

Refer to your tire manufacturer's instructions for installation and safety information. In addition, consult your local bike shop for tire installation and safety information.

Use only non-metal tire levers for tire removal. Do not use metal tools, such as pliers or tire levers to remove the tire. Metal tools can damage the rim surfaces, which can lead to improper tire seating, damage and/or F+B Product failure. Do not use metal tools of any kind to remove tires from the F+B Product, such as screw drivers, pliers, tire levers, etc. Use only plastic or recycled FUSIONFIBER® tire levers for tire removal.

# !! WARNING !!

Do not fill your tires with an air compressor, such as those found at gas stations. Tire inflation can occur too quickly, and air pressure can cause your tire to blow off the rim, which can cause serious injury. Do not exceed the 60 psi maximum inflation for 25mm wide Gravel carbon rims and 40 psi maximum for 30mm wide mountain rims. Over inflation may damage the rim. Refer to your tire manufacturer's instructions to ensure you do not exceed their max pressure warnings.

# **Tire Specifications**

Rim Model	Recommended Tire Width
F+B 30 EM 28H	2.3" - 2.6"
F+B 30 EM 32H	2.3" - 2.6"
F+B 25 GR	32c - 47c

## **How To Care For Them**

#### Where to keep them

Treat your wheels like you would want to be treated. Store the wheels where they will be protected from danger. Excessive heat is not a carbon composite wheel's friend. Do not put them near excessive heat, such as open flame or heaters. Clean your wheels often and if you put them away for the season, clean and service them before they go away so they're ready to rumble when you're ready to get back out there.

### Keep 'em Clean

Use a moist cloth with a gentle (preferably bio-degradable) cleaning solution of dish soap and water to clean your wheels. High pressure water and industrial solvents are not good for your wheels; don't use either.

### **Incidental Damage**

Use common sense. Take care when attaching things like car racks or work stands to your wheels. Apparatuses like these can cause damage to the rims. Excessive pressure to the rim surface can damage the rim.

## Storage & Travel

If you ship or travel with your wheels, package them like you don't want them to be damaged. Pack your wheels in a carton, like a wheel box, or a hard case. If the wheels are not packaged correctly, they'll likely be damaged in transit. When in doubt, your local bike shop should be able to package the wheels for you.

### **Regular Service**

Special knowledge and tools are required to properly service and inspect a wheel. Only trust a certified and professional bicycle mechanic. Use this manual in conjunction with the manuals supplied by other component manufacturers.

## Wheel / Rim Recycling

We actively recycle the rims and wheel parts we receive through our Return to Fun warranty program and reimagine them into a new high-performance product. If you end up with a rim or complete wheel that you no longer need and don't know what to do with, contact us at serviceaforgeandbond.com and we'll make arrangements to bring it back and give it a new life.

# Warranty

To make a warranty claim related to the F+B Product, you must register your F+B Product. forgeandbond.com/support

### **Lifetime Warranty**

Let's make this easy. If you buy a set of our wheels brand new directly from us or from one of our authorized retailers, or they come as original equipment on a new bike you buy, they're covered by a lifetime warranty.

## **Return To Fun Warranty Program**

In the event you crack one of our rims during normal intended use, we'll replace it for free. We process all warranty claims through our production lab in Utah — that's how we reclaim our FUSIONFIBER® material and create something new from it.

## **Crash Replacement**

If someone (certainly not you), runs over it with their Toyota Tacoma at the trail head, no worries, we'll help you out with a cost effective "crash replacement." Riding time's too precious to sit around waiting. Contact <a href="mailto:service@forgeandbond.com">service@forgeandbond.com</a> and we'll do our best to get you back on the bike as fast as we can.

# **Warranty Cont.**

### **Secondary Owners**

Even though you didn't buy the wheels at full pop, we still honor the quality and durability of our product; plus it's part of our environmental responsibility policy and the way we reclaim our FUSIONFIBER® material and create something new from it. Secondary owners are also eligible for the Return to Fun and "crash replacement" programs. However, both programs are offered at a discount off MSRP at FORGE+-BOND's discretion. Contact us <a href="mailto:service@forgeandbond.com">service@forgeandbond.com</a> and we'll do our best to get you back on the bike as fast as we can.

## **Repair or Replace**

FORGE+BOND will repair or replace, at its option, any FORGE+BOND rim that is damaged or destroyed while you are riding your bicycle with the F+B Product properly installed. The warranty will be in effect for the lifetime of the F+B Product per the warranty policy. Proof of purchase will be required.

Everybody has a bad day; it happens to the best of us. Run over a wheel or forget to take your bike off the car before pulling into the garage? We've got your back. Let us know how you damaged your F+B Product (not while riding) and we'll work with you on a replacement F+B Product at a reduced price to get you back to riding as quickly as we can. File your claim on the warranty section of our support page and we'll be in touch to organize a F+B Product replacement.

### File a Warranty Claim

File a warranty claim using our Warranty Claim Form at <u>forgeandbond.com/support</u>. We'll do everything we can to get you back to riding as fast as possible.

If you have any other questions, or would like to follow up on a warranty claim, contact our Warranty Department <u>serviceaforgeandbond.com</u>

### What is not covered by this warranty?

The warranty does not cover labor costs, custom finishes, normal wear and tear, damage from commercial use, or failure to follow the instructions in the manual.

This Warranty is void under the following circumstances and does not apply to damage caused by (1) Improper assembly or installation. (2) Neglect, improper repair, improper maintenance, or other abnormal, excessive, or improper use. (3) Corrosion. (4) Improper alteration or installation of the F+B Product. (5) Failure to perform maintenance or service at appropriate intervals in accordance with the Manual; all as determined by FORGE+BOND in its sole discretion.

The warranty for damage arising from accidents, crashes and other impacts is limited to offered replacement at a reduced charge as set forth above.

# The Legal Stuff

The Limited Warranty is applicable for F+B Product purchased in the United States of America after April 11, 2023. The Limited Warranty is a voluntary manufacturer's warranty by CSS COMPOSITES LLC for the United States ("F+B"). It applies to the F+B Product referred to above, purchased in the U.S. and is provided at no extra charge. Your rights under this Limited Warranty are in addition to and separate from your legal rights as a purchaser of the Product which may vary by country, state, province, or region. This Limited Warranty does not affect these rights.

F+B warrants the F+B Products for a limited time from the date of original retail purchase against defects in materials and workmanship when used normally in accordance with F+B's published guidelines and instructions (see the Manual). "Original retail purchase" means the F+B Product was purchased new for the first time from an Authorized F+B Retailer or directly from F+B.

## Limitations

THIS IS A FULL AND COMPLETE STATEMENT OF F+B'S WARRANTY FOR THE F+B PRODUCT. NO OTHER REPRESEN-TATION OF ANY KIND BY ANYONE SHALL CREATE ANY WARRANTY REGARDING THE F+B PRODUCT, F+B'S LIA-BILITY UNDER THIS WARRANTY SHALL TO THE FULLEST EXTENT PERMITTED BY LAW BE NO GREATER THAN THE AMOUNT OF THE ORIGINAL PURCHASE PRICE AND IN NO EVENT SHALL F+B OR ANY OF ITS OWNERS, OFFICERS, EMPLOYEES, REPRESENTATIVES, AGENTS, OR AFFILIATES (OR ANY OF THEIR RESPECTIVE SUCCESSORS OR ASSIGNS) BE RESPONSIBLE OR OTHERWISE LIABLE FOR ANY DIRECT. INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING WITHOUT LIMITATION DAMAGES FOR PERSONAL INJU-RY, PROPERTY DAMAGE, OR ECONOMIC LOSSES, WHETHER BASED ON CONTRACT, WARRANTY, NEGLIGENCE, PRODUCT LIABILITY. OR ANY OTHER THEORY.

Some states, provinces, or countries do not allow the exclusion or limitation of certain damages or warranties, so the above limitations or exclusions may not apply. Any implied warranties (including without limitation the warranties of merchantability and fitness for particular purpose) which may not be disclaimed under applicable law are limited in duration to the period set forth above or the applicable statute of limitations, whichever is shorter. If it is determined by a court of competent jurisdiction that a certain provision of this Warranty does not apply, all other provisions shall remain in full force and effect.

To view the most current warranty information please visit <a href="https://www.forgeandbond.com">www.forgeandbond.com</a>.

FAILURE TO FOLLOW THE INSTRUCTIONS IN THE FORGE+BOND WHEEL OWNERS MANUAL VOIDS THE WARRANTY.

FB-2023 V1.0 OWNERS MANUAL