

# **Looking In From The Outside,**

## **A Third Party View of Tiffin, Entegra and American Coach**

### **Introduction:**

I receive many requests for advice and opinions regarding motorhomes. One popular query is to compare brand X with brand Y and to give my opinions on which is better. So, I decided to create this document to save me from having to retype everything whenever I receive these requests. It will compare the three manufacturers that I am familiar with – Tiffin Motorhomes, Entegra Coach, and American Coach. They also happen to be the ones I am most interested in personally, therefore any other manufacturers are excluded. This information strictly reflects my personal opinions however it is based upon extensive research into each brand, including in-depth trips to each of their factories to view just how each brand goes about constructing their motorhomes. Therefore the information and opinions given are based upon some reasonably detailed knowledge of these products.

My research and experience has shown me that there is no one motorhome manufacturer that has it all. No one brand is bulletproof and I have helped owners deal with issues on 1.8 million dollar Marathon Coaches as well, so price alone doesn't guarantee perfection. Each of these three manufacturers have performed well in the market and have respectable products. Each manufacturer has strengths and weaknesses, which are generally found in different areas. The purpose of this document is to express my viewpoint of what I perceive those weaknesses are, as well as their strengths. I will call it as I see it with no holds barred. If you want flattery, read something else.

This document is not to be published in any online media but it may be reproduced and sent to others as desired. I just don't want to put it up on a website and start a major debate nor offend owners of any of those three brands.

### **Company Backgrounds:**

As a background, I've always been a nuts and bolts kind of guy who leans towards quality stuff that works. I've never been a proponent of the patch it the cheapest way philosophy. In my personal business we rent, sell and service tools and construction equipment. Throughout over 30 years of dealing with equipment manufacturers I've found that you can generally categorize companies into one of three categories based on their goal and method of achieving that goal.

One class is the "marketing" driven company. These manufacturers know how to sell their product. Throughout the year they will have sales promotions, a trained and aggressive sales force, terms, dating, and good pricing (which is generally based on a sliding scale due to volume of purchases). Their product may be of excellent quality, it may be of average quality, or it may be of poorer quality but at a very low price point. The majority of the sales at any buying show are snagged by these companies. Being allied with these manufacturers is a good thing if you can fit within their volume discount structure in order to be competitive and if the quality is good enough to create customer satisfaction.

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Another class is the “engineering” driven company. These companies generally do not have the large volume of sales that the marketing class does. They are generally smaller in size and headed up by the owner, who initially launched the company based on a product he created. This equipment usually costs more than a similar item from a marketing based company but it will be built to higher standards. These items can sell well in a niche market where a customer seeks higher quality above price. These are the items I prefer to use in my equipment rental fleet because in the long run they will cost me less due to reduced maintenance expenses and greater rental utilization due to minimal downtime.

The last class is what I call the “bean counter” class. These companies are generally multi-depth and may have started out as a good thing but have now been acquired by a larger corporation to include in their portfolio. The only reason to acquire them in the first place was as an investment. They rarely have an actual interest in the product itself but are just looking to corner market share and help leverage costs over multiple organizations. The goal of profitability is overseen by remote CFOs who never truly understand the product, its customers or the market segment. Decisions made on a spread sheet become the overriding factor and cost reductions and attempts to streamline the production process eventually affect the product in a negative way. I avoid these companies if at all possible.

### **My Perception of Tiffin Motorhomes, Inc:**

Tiffin Motorhomes has built up a great reputation over the years. By this point in time most every motorhome owner knows that Tiffin takes care of their customers and will continue to do so after the one year warranty has expired. Bob Tiffin meets and greets customers at a number of RV shows every year and will always return phone calls, which is not typical in the corporate world. A down-home friendly feeling is put forth that makes you feel like you might be dealing with your neighbor rather than a conglomerate far, far away. That’s a plus in today’s technical, Internet based, voice mail world where personal contact is minimized in the interest of cost management and downsizing.

Tiffin is located in Red Bay, Alabama so that southern small town atmosphere is present and the pace is quite laid back. This seems to be present in the engineering as well. Tiffin has innovated a number of features in their line but as things get more complex it seems like the initial testing isn’t quite up to the task. Every now and then a serious issue crops up that was unforeseen. Granted, Tiffin always takes care of it later on but not every customer wants to return to Red Bay to have their coach repaired under warranty. Issues can always exist but some of these could have been avoided with more thought put into the design up front. A number of issues recently surfaced, such as wet bay floors rotting and sagging, sidewall cracks, and cracking fiberglass at the roof cornices. These could have been prevented with a bit more stress on the initial design.

Tiffin coaches sell for two huge reasons. One is the reputation of them standing behind their product for as long as you own it. The slogan “we ride with you” is a true representation of that philosophy. Couple that with Bob Tiffin’s presence and that is probably close to 50% of the reason people buy Tiffin coaches. They have that feeling of assurance and security when buying a Tiffin.

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The second reason is that Tiffin knows what customers want. They pack the most useable storage into all of their coaches. The floorplans are designed to be very functional rather than accent the bling that some manufacturers go for. They do add a certain amount of “pop” to the coach interiors to round this out but the real reason for their success is that the layouts are both attractive and functional. Tiffin coaches are also priced competitively and perceived to be an excellent value. Tiffin will do no customizing. They are devoted to keeping the assembly line moving and any non-spec item will cause confusion and slow things down. If you want any custom modifications it will be have to be done by the dealer or another third party after you take delivery of the coach. This emphasis on production and getting product to market early and out the door appears to take priority over taking the time to engineer things well. That emphasis also appears to take priority over quality control as well.

Naturally, the Internet is a huge factor in the RV industry. No longer are buyers limited to word of mouth from other campers and a salesman’s pitch. The Internet makes everything known that is out there and a number of RV related forums exist where everyone is telling everything. This is good if you have a product worth praising but not so good if you have problems. Tiffin’s high level of customer service is well known and is one of the largest reasons for its sales growth in recent years. Customer satisfaction with the layout and performance of the coach is also laid out for all to see and Tiffin has gained substantially from that. People who would not normally consider a Tiffin will now take a look based on all of the favorable responses.

Unfortunately, the Internet is a double edged sword. The recent quality issues that Tiffin has experienced have caused some potential buyers to question that decision and go with another brand, such as Entegra and American Coach, among others. Many buyers question the engineering of Tiffin coaches and, while they know that Tiffin will take care of them, they don’t want to have to drive the coach to Red Bay to have it taken care of all the time so they buy another brand. They seem to feel that Bob’s influence is slipping and that the boys are more concerned with the bottom line and don’t have the passion that Bob does. Personally, I see this as the biggest factor affecting Tiffin Motorhomes today.

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## **My Perception of American Coach, Inc:**

American Coach is a division of Fleetwood. Before the economic crisis hit and forced Fleetwood into bankruptcy American Coach was a high end coach. It was priced higher than the typical Fleetwood, Winnebago, Tiffin, etc but was always perceived as a quality product. The reason the original Fleetwood floundered was because it spent money unwisely, not because of the quality of the product. After the closure, Fleetwood was resurrected when the assets were purchased by Allied Specialty Vehicles. ASV owned a number of other related companies so could be considered as being in the “bean counter” class. Excess manufacturing capacity was curtailed and now American Coach is being produced in the same building as the Fleetwood class C and class A motorhomes on one of three assembly lines dedicated to each particular class. The emphasis on “lean manufacturing” is ever present. Large ceiling mounted clocks inform workers how much time is remaining before the stations shift. Accessories and consumables are placed in vending machines near each location to minimize downtime and keep each worker at their station. Just in time inventory management makes for a warehouse that is practically empty. In fact, most components arrive the day before they are scheduled to be installed in that coach. Everything is organized to a tee and the word “lean” is pretty much thrown into every other sentence when listening to them. The end result is that the operating costs of building each coach are greatly reduced. There’s nothing wrong with that but I feel that they are over the edge in their emphasis on this. I see the CFO on the floor looking for ways to improve costs and am a bit concerned this emphasis on cost cutting will cause them to reduce the quality of what has previously been high as the years go on.

A good example of this was the recent shift from Spartan to Freightliner in their chassis. American Coach does make their own Liberty chassis, which is very impressive. It’s a trussed bridge style center section that uses front and rear clips from Spartan or Freightliner. The Spartan based Liberty chassis has been accepted for years as the best there is and I have to agree with that. Spartan has always had a commitment to quality as well as customer service. Freightliner has always found ways to cut costs and do the minimum necessary. Dumping Spartan to go with Freightliner might save them some money but I think it’s the wrong thing to do on the American Coach line. However, I expect to see this more and more as the bean counting continues in other areas.

Over the last year or so a number of Tiffin owners looking to upgrade have moved from Tiffin to American Coach. The reasons for this were issues they have experienced with having to go to Red Bay to “fix what should have been better designed in the first place”, according to the forums. Others read what they are saying and skip buying Tiffin altogether and just go to American Coach in the first place. At present this is working for American Coach but eventually I see this as fading as their quality drops and bean counting continues. But, they will have a good reputation in the near future. They will need to drop their price to be competitive or else the majority of the buyers who fear Tiffin’s recent quality issues will go to Entegra or another brand that is priced similar to the Tiffin product they were interested in. As is, American Coach prices are at a premium. One benefit American Coach has is that they will customize most anything in the coach. It will come at a hefty price but if you are willing to spend the cash you can have things changed to make your coach exactly as you want it.

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## **My Perception of Entegra Coach, Inc:**

Entegra Coach is sort of the new boy on the block, yet it isn't. The roots of Entegra began with Travel Supreme, in Wakarusa, Indiana. When the economy caused Travel Supreme to close, Jayco bought most of the assets and began Entegra Coach. Travel Supreme always made a good product and its owners were always very happy with their quality but their coaches were always priced quite high, which limited sales volume. This, and certain inefficiencies in their operation eventually caused their demise. When Jayco bought the assets they reworked the product using Jayco's efficiencies into a competitively priced coach. They retained the Travel Supreme floorplans and construction techniques and a large number of former workers now make the trip to Middlebury each day to build Entegras.

Therefore the character of the company is a hybrid between marketing and engineering. Jayco knows how to sell RVs and has excellent management processes in place to ensure profitability and sustainability in the long run. They also have a commitment to customer service. It's similar to Tiffin's philosophy except that it was never really known in the class A marketplace due to Jayco's absence from that segment. Rather than having to contact a Bob Tiffin, Jayco has enabled its front line customer service personnel to make those decisions. 16 different people can authorize warranty repairs at any point of the coach's life span if they feel it's warranted. They have a reputation for bending over backwards with customer service and receive accolades from satisfied customers to a level not enjoyed by other manufacturers. They also have a 2 year bumper to bumper warranty, which is unique in the class A market. Jayco's Christian based morals and values extend into every area of their operation.

Having inherited the basic design and engineering from Travel Supreme was a huge plus. These coaches were built as high end and their construction is second to none. Quality components are used throughout the coach and the care and detail put into their construction reflects the Amish influence on quality by their workers.

The Internet is going to be a big help to Entegra. As a fairly young company Entegra doesn't have a whole lot of track history. Forum posts by satisfied Travel Supreme owners going back years exist and Entegra is accepted as having that same level of quality so that helps get the ball rolling but history for Entegra will take some time to develop. Fortunately Entegra owners are ecstatic about their coaches as well as Entegra's customer service so, as of right now, all dialog is positive and will help Entegra get rolling. Demand is already increasing and Entegra's biggest problem right now is being able to make them fast enough without affecting the quality in a negative way. Expansions to the factory have been made and more are in the works but you still need to train the workers and bring them up to speed or else you risk quality control issues, which would be counterproductive to the excellent reputation that Entegra is now experiencing. In my opinion the excellent reputation for taking care of customers is Entegra's number one job. Continuing to provide astounding service over and above will cause customers to rave about that on the RV forums, which will result in a large number of potential buyers taking a look at Entegra when it's time to kick some tires. So far they are doing great in that area and I predict Entegra to be the real growth opportunity in these next few years as they increase their share of their market segment.

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Entegra has brought the price point down to competitive levels on their coaches without sacrificing quality. Their biggest weakness right now is in determining just who wants to buy these coaches and how to best meet their needs. The original Travel Supreme was a pricey coach that was purchased by high end buyers more for the bling than functionality. These owners were more likely to dress for dinner and drive to a restaurant, rather than spend time actually cooking in the coach. But that was a limited market segment and Travel Supreme's low sales volume reflected that. Entegra is not geared to that market segment. Entegra is closely matched to Tiffin customers. The Aspire-Phaeton, Anthem-Allegro Bus, and Cornerstone-Zephyr are good comparisons. But Tiffin's practical floorplans and plentiful storage are one of the reasons for their success. Entegra needs to concentrate more on meeting the needs of these buyers. At present the emphasis seems more on bling than practicality. However, I do see changes coming in this area and new floorplans are being brought out on a regular basis so I see a good outlook for this as time goes on.

With the right floorplan and the right set of user amenities, buying an Entegra should be a no brainer. Their customer service reputation is impeccable, the coach exterior looks great, the Amish cabinetry and quality of construction is excellent and the price is competitive. It would be hard for any open minded motorhome buyer to decide to go with any other brand. A test drive in the coach will clinch the sale because it handles well and is the quietest riding coach available. I have heard of a number of potential buyers who took a look, weren't impressed, and bought another brand elsewhere but it was always due to dissatisfaction with the floorplans or features.

Entegra also can't afford to slow up their production line with custom orders due to their backlog. If any custom work is desired Entegra, like Tiffin, will not do that. However, they do have outsourced companies in the area that can do that for you. They can direct you to them so that you can arrange to have those things done.

### **Chassis Basics:**

**Tiffin** uses traditional motorhome chassis. In some cases this might be a Freightliner or a Spartan while in others they may be their own proprietary Powerglide chassis. The Powerglide is a traditional chassis designed by Gary Jones, who penned Alpine Coach's Peak chassis as well as Country Coach's Dynamax chassis and others. His designs always favor building a durable chassis with excellent handling characteristics and this has migrated to the Powerglide as well. The quality of the Powerglide exceeds that of the Freightliner and is equal to that of the Spartan. One issue that plagues most motorhome owners is that certain problems can be elusive to track down and finger pointing between the coach builder and chassis builder as to whose warranty responsibility it is can occur. With Tiffin making both the coach and chassis this is eliminated so that is perceived as a plus by Tiffin buyers. In addition, any mid-stream design changes can be quickly put into place because the red tape and communication between coach builder and chassis manufacturer does not exist. Powerglide has had their share of issues with components that weren't performing right but Tiffin was able to quickly respond to the issue and take care of it. Other than that, the Powerglide is a traditional chassis with the usual attributes common to them.

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**American Coach** takes a unique approach. Rather than use the raised frame rail construction common throughout the industry, their Liberty Chassis consists of a truss bridge design center section that is married to front and rear clips supplied by traditional chassis manufacturers. This gives them the same drive train and steering mechanism common to traditional Freightliner or Spartan raised rail chassis. Raised rail chassis offer large pass-through storage room beneath the main rails. The support for the coach floor and compartments framing is all done by welding up a sub-frame structure and attaching those weldments to the frame rails. The Liberty eschews the C channels used in raised rail construction, replacing them with laminated I-beams. These I-beams are not as tall as C channels therefore they offer greater clearance between the bottom of the rails and the basement flooring, which improves storage capacity. The I-beams are laminated in certain stress spots to provide additional strength. The entire sub-frame structure is all part of the center bridge, including support for the main floor as well as all basement compartment framing. This makes for a very rigid structure that minimizes the racking and twisting common to normal raised frame rails. The end result is basement compartment doors that never stick and a superstructure that retains its form and minimizes those squeaks and groans that occur after some miles have accumulated.

One other benefit to the Liberty is that the fuel tank location is no longer determined by the chassis manufacturer. Tag axle coaches tend to ride heavy on the front end while having more than enough capacity on the rear axles. The Liberty chassis relocates the fuel tank to a mid-ship location. This reduces the weight on the front axle and also minimizes front to rear weight transfer as the fuel load varies. I feel this is one of the biggest benefits of the Liberty chassis that just isn't available on a traditional raised rail chassis. The biggest concern to me is American Coach's decision to switch from Spartan to Freightliner. I had the opportunity to drive both chassis and see them in various stages during construction. In every area the Spartan was better than the Freightliner. It was the small details, like plastic overflow bottles and thin gauge accessory mounting brackets but any of these will cause a failure just as much as an axle or engine. The Freightliner emphasis is on minimalism to put forth a lower priced chassis while Spartan's emphasis is on durability and over engineering things. That would be the biggest nail in the coffin to me purchasing an American Coach at this time and I'm sure that any other motorhome owner familiar with Spartan will feel the same way. Just as a point of reference, the ex-Tiffin owners who left to go to American Coach have the Spartan chassis. The Freightliner is a recent change.

**Entegra** uses a traditional raised rail chassis but modifies it and strengthens it with diagonal cross bracing and other weldments. Basically they modify the Spartan chassis to give it rigidity that is very close to American Coach's Liberty chassis. They can't relocate the fuel tank rearward because of this but I found that the Entegra handles nice and flat in the corners, much better than the Tiffins and just as good as the America Coach products. By keeping the chassis rails parallel and rigid they allow the suspension to do the work. The lack of twisting should yield similar results as the Liberty chassis in the long run as far as structural integrity and minimal squeaks and groans. It's a different approach than the purpose built Liberty but the results are very similar, which puts them into a very close second place for "best chassis" award. Entegra also uses Spartan chassis and no longer uses Freightliner so that too illustrates their commitment to quality. With American Coach's recent shift to Freightliner, Entegra's modified Spartan chassis would be my preferred choice at this time.

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### **Coach Construction:**

**Tiffin** uses the vacu-bond lamination technique to create their sidewalls. This is pretty much the standard method of doing this throughout the motorhome industry. A foam wall insulation is laid on top of the luan interior board on a large table and a CNC router machines the foam to accept aluminum structural tubing, wiring, window and slideout openings, etc. The aluminum tubing is laid in place and welded. The fiberglass is then glued to the wall structure and placed into a press that heats and applies pressure to vacu-bond the wall together as a complete module. After sufficient time has passed for the wall to cure it is set on top of the floor and screws are inserted up from the bottom to hold it in place. As long as the glue holds in place the wall is sound and no delamination occurs. Looking at the coach exterior on a cool morning when the skin has condensed will easily show you exactly where the structural tubing is located because it's the one place you won't see any condensation. This reveals that Tiffin has tubing placed in key areas but no more than that. In fact one issue they had when the tag axle Bus was first launched was sidewall cracking at the bedroom slide due to lack of support within the wall. Mine was one of many repaired under warranty at Red Bay and the official fix was to repair the damage, then cut a slot in the fiberglass to allow future shifting and cover it with a piece of trim molding. As such it was more of a damage control repair than a true rebuild and strengthening upgrade.

The wall structure rests on the floor substructure, which consists of a steel framework covered with OSB flooring. Screws from beneath hold the wall to the floor. The roof structure consists of aluminum tubing, foam insulation board similar to the vacu-bonded wall construction except the finished fiberglass is laid on top and glued down without being placed in a vacu-bond press due to its size and bulk. The roof is then set into place and fastened to the walls. This too is fairly standard construction within the industry. A few years back a change from steel to aluminum in the crossmembers was made to reduce weight and improve CCC but now some of these roofs are appearing at the service center with sagging ceilings due to roof trusses that sag and are not able to support the weight. Tiffin does place their crossmembers at respectable 16" centers but it would appear that the strength of each truss is inadequate since they switched from steel to aluminum in their construction so a heavier gauge crossmember is needed.

The front and rear caps are molded fiberglass units that are fastened to the coach sidewalls. A rubberized trim strip is used to cover the attachment points. The windshield is placed into a rubber grommet that fits into a cutout in the fiberglass. Coaches are painted with BASF paint and two coats of clear coat are applied over the color coat.

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**American Coach** also uses the vacu-bond lamination technique to create their sidewalls. Their method is very similar to Tiffin and they seem to have the same amount of structural tubing as vertical supports. The big difference that American Coach claims is their interlocking construction. The walls do not rest on the wood floor structure. Instead, they fasten a channel assembly just outboard of the floor that is attached to the steel subframe beneath the floor. The walls have a matching interlocking piece that sets into the channel. Self-drilling screws then hold the wall into the channel so it cannot lift out or slide around. They claim that is the secret to gaining all of their strength. Personally I can't see how a wall resting in a channel or a wall resting on the floor is any different as far as the ability to support the load. Maybe there is a benefit, but I'm just not seeing it. Their roof structure also interlocks into the top of the wall. Supposedly this gives it more strength. Again, I can't see any difference in load bearing capacity but it is possible that these interlocking channels may help keep everything square and minimize the racking that typically occurs as these big boxes move from side to side. Again, this is just conjecture on my part. I also found their floor to be thinner than the Tiffin.

American Coach is big on full-wall slideouts. This opens up a huge hole in the side of the coach. My concern is "what holds up the roof" with that cavernous gap and no vertical support for a wide area? Yet, American Coach owners seem to be happy and don't report any complaints regarding lack of structural integrity so they must make it work somehow. They claim it's all due to their interlocking channel construction but there is nothing to interlock for about 30' on a full wall slide so I find that hard to believe. When at the factory I did notice a few things. For one, their roof structure is fairly light. Tiffin uses roof trusses on 16" centers but American Coach uses far less of them and keeps the roof fairly light. They also add a large steel or aluminum header that spans the full wall opening. This transfers the load to the ends of the opening, where it can be borne by vertical supports. Apparently this makes it work for them. The drawback is that the height of the slideout is reduced to allow for the header. This makes for very short windows that are not easy to look out of. An American Eagle that I looked at even had some custom work done so that the overhead cabinets were removed from the slideout so the windows could be made larger, which was a \$26,000 add-on. So, you either get nice windows or nice storage space with short windows.

American Coach uses DuPont Chromabase paint and 3 coats of clear coat are applied over the color. The Revolution was recently moved from the Fleetwood line to American Coach as their entry line. They have three assembly lines, a class C line, a standard class A line, and the "high line" where all of the American Coach product is built. The Revolution uses the standard grommeted windshield and dash heat/air system common to the standard line Fleetwood class As but the Tradition, Eagle, and Heritage are the true American Coaches and utilize upgraded items in many cases. The true American Coach line does not use the typical rubber grommeted windshield. Instead an automotive style windshield is mounted to a steel frame with adhesive, just like in your car. This heavy steel frame then bolts to the coach's firewall and precludes any possibility of the windshield glass popping out of the grommet due to twisting of the body. The substantial steel frame also helps provide stability. If the windshield needs to be replaced it can be done in the same manner as any automotive windshield. The Tradition and up do not use the 17,000 BTU Denso dash air/heat that the Revolution and everyone else uses. They use an SGM system with 34,000 BTU of dash air, 46K of dash heat, and an additional 44K of dedicated dash defroster heat. This system was used in the fire truck industry and is eliminates the shortcomings found in the Denso systems. That's a big plus and selling point in my opinion.

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**Entegra Coach** is unique in their construction. Entegra follows with the Travel Supreme construction techniques that utilized hung wall construction rather than vacu-bonding. To the best of my knowledge the only other coach build to use hung wall construction is Newmar. Seeing as how Travel Supreme was formed by ex-Newmar people it's easy to see why Entegra uses hung wall construction. Vacubonding relies on adhesives to glue the outer fiberglass skin, foam insulation board, and luan plywood together. The structural tubing is placed into this sandwich and the entire composite assembly is placed into a press, heat is applied, and a vacuum is applied to remove any air or moisture. This assembly then is placed on the coach and fastened to the floor with screws.

Hung sidewalls are similar to a stick built home construction in that the exterior siding is applied after the wall is erected. Aluminum tubing is placed into a jig and welded. Interior plywood is fastened to the inside of the wall framing and the wall assembly is lowered into place on the coach floor. The outside of the wall is exposed so a bolt and locknut can now be used to fasten the wall to the floor, which prevents any issues with screws pulling out or shearing off. Insulation is then applied and the outer fiberglass is glued to the wall.

Entegra's hung wall construction uses larger size aluminum tubing which gives a thicker wall, giving better strength and insulation value. A vapor barrier and reflective insulated waffle foil insulation is applied to the interior plywood and then foam insulation is fit into each cavity to complete the insulation process. The outer fiberglass is then hung on the wall structure. Entegra uses true 16" centers on their wall studs while other manufacturers only apply them minimally as needed. Entegra's roof construction is also substantial. Large aluminum trusses are placed at 16" centers but many additional trusses are placed to provide additional support at specific load areas. 3/8" plywood is then placed over the trusses, which are also insulated with foam. Entegra's roof is the strongest I've seen on a class A. The only drawback to that is that it probably is not suited for a full wall slideout floorplan because the header required to support it would be quite massive.

Entegra's floor construction is also unique and the end result is the warmest and quietest floor in the industry. Most manufacturers build a steel subframe structure to support the floor, then apply the OSB flooring to that, adding some insulation board in between the steel crossmembers. Entegra builds a steel subframe but then adds a 2x4 wood floor structure and two layers of plywood. This isolates the floor from the steel beneath it and makes for a much quieter ride. It also gives them the ability to apply in-floor hydronic heating tubing and add plenty of insulation to give it an amazing R-33 value. The slideout mechanism is mounted on top of the steel subframe rather than cut into it for additional rigidity and increased basement space. Entegra goes to great lengths to provide the quietest ride and best insulation in the industry and many small detail steps are taken to ensure that happens. Entegra also installs the cabinets into the coach before laying the ceramic tile floors. The floor tile is laid up to the cabinets whereas most manufacturers lay the tile first and then set the cabinets on top. This can place extra stress on the tiles and make them harder to replace when they do crack.

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Entegra's front cap uses the typical rubber grommet windshield and additional fiberglass batt insulation is placed in the front cap to further quiet the coach and help insulate it. The paint finish is spectacular. Precision Painting uses Sikkens premium paints and applies 5 coats of clear with a cut and buff after the third and final coats. The high end fiberglass used by Entegra has no luan backing so you won't have to worry about any thermal expansion and hairline cracking due to wet luan. In fact the combination of the fiberglass quality, the hung sidewall construction, and quality paint job give the Entegra the smoothest finish possible. The Tiffin and American Coaches may have nice paint jobs but they always have a bit of an orange peel look to them and will never achieve the mirrored, smooth, deep glossy finish of an Entegra.

Entegra has better visibility when driving as well. Their dash tapers down in the front, rather than being horizontal, exposing a larger windshield. This extra visibility allows the driver a few extra feet of view so that tight turns or close parking maneuvers can easily be accommodated without any blind spots. This also offers better mirror placement. American Coach utilizes the high mounted Bus style mirror arms that mount to the upper cap, along with the windshield wipers. Tiffin uses lower mounted mirror arms. Both are at eye level. Entegra also uses low mount mirror arms but they are much lower due to the dropped windshield. This eliminates blind spots because the driver can look over the top of the mirrors to see any oncoming traffic, especially at intersections. The lower angle also offers better mirror coverage. With the Tiffin mirrors you can adjust them to see back behind you but you will not be able to see your rear tires during tight maneuvers unless you use the remote mirror control switch to angle them down. American Coach fixes this by using 6 way mirrors. That allows one convex mirror to be adjusted for driving and blind spots while the other convex mirror can be set to view the lower portion of the coach. Entegra's lower position 4 way mirrors let you see everything in one view because you are looking back instead of down.

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## Recap:

Buying a coach is always an exercise in compromise. No one brand seems to have all of the marbles so you need to decide which features you are willing to give up to gain the features you really like. Everyone has a different opinion because each buyer has different tastes and needs. You need to weigh in a number of factors:

1. Strength of construction and reliability
2. Customer service, support and warranty
3. Floor plan design
4. Features and amenities
5. Functionality and efficient use of storage space

**Tiffin** offers a lot of bang for the buck, excellent storage and functionality, great floor plans, and an attractive coach. If they can eliminate their QC issues and improve their reputation they'll remain at the top of the heap.

**American Coach** seems to appeal to those customers who are looking for quality and willing to spend a bit more to get it. Their floor plan selection leans heavily towards full wall slides but a large number of buyers seem to lean that way as well. The Liberty chassis is a legend and well received but that reputation was based on Spartan supplied front and rear clips. With the recent shift to Freightliner this may change. If they become too cost conscious and cut back more on the product this will change and they won't be the same as they once were.

**Entegra** is the sleeper of the bunch. They are starting out and gaining ground fast, which undoubtedly is a concern for the competition as Entegras keep showing up in the hands of previous owners of other brands. They have the best warranty and customer support of any RV manufacturer, offer a rock solid chassis with quality components and construction throughout. Their biggest weakness is a bit more emphasis on the look rather than functionality. But this is a work in progress. If they develop new floor plans and build storage cabinetry that are accepted as well as Tiffin's they'll be unstoppable.

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