

The Complete Guide for Special Event Tent Air Conditioning

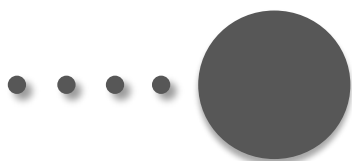


Learn how to select
the best tent air
conditioning
method for your
special event.

Share this Ebook



Not quite sure if this eBook is right for you? We don't want to waste your time so check out the categories below to see if the content you are about to read will be helpful to you.



**Special Event Managers,
Designers, Equipment Suppliers**



Brides

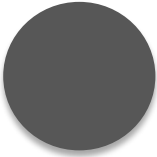


Venue Managers /Owners

Share this Ebook



Special Event Managers, Designers, Equipment Suppliers



PARTY is your middle name and **PLANNING** is your nickname. You manage every detail of an event, from conception to execution.

Events include weddings, corporate events, special celebrations, you name it! The professionalism and expertise of each vendor affects your reputation so you want to partner with folks who follow through and deliver an awesome experience.

When outdoor events include a tent or temporary structure, you may have to contract for generator power and air conditioning.

This eBook will help you choose the best method for air conditioning each of the tented events you manage.



Share this Ebook



Brides

You've dreamed about your wedding for years and want to make sure everything is perfect. Your special day should be memorable for all the RIGHT reasons.

If you plan to have your wedding or reception in an outdoor tent you can't control the weather, but you CAN control the comfort inside the tent with the right tent air conditioning method. You have a choice of air conditioning vendors with many different units to offer.

This eBook will help you choose the best tent air conditioning method for your venue and budget.



Share this Ebook



Venue Managers /Owners

Each day is special because you have a new event to manage for your facility. New memories to be made for each special occasion ...and there are no **“do overs”** so you want it done right the FIRST time.

The vendors you choose should be able to provide services at your facility with minimal impact on the surroundings. You want to please the customer and keep your venue pristine for the next event... which is often the next day!

This eBook will help you choose the best tent air conditioning method for each special event tent installed at your venue.



Share this Ebook



Written by

Marlin Spencer



Marlin Spencer

AirPac Inc. / Event Solutions

Mobile: 540.664.1774

Direct: 540.635.5022

Office: 540.535.5011

mjs@airpacinc.com

Marlin is the “Director of Comfort” for the Event Services Division at AirPac. He’s an engineer by degree which is apparent in his attention to detail! He works with Special Event Planners, Venue Managers and Private Party Clients to make sure tented events are comfortable – no hot sweaty faces or shivering guests.

Share this Ebook



Edited by
Tina Behnke



Tina is the triple C – or Chief Content Creator at AirPac where she creates useful content to educate and inform potential clients. Educated prospects often become delighted customers and make a great partnership!

Designed by
Robin Schmich



Robin is AirPac's International Intern from Germany. For the short time he is at AirPac he's using his creative talents and skills to do the hard work of actually designing and creating content like this eBook!

Share this Ebook



About AirPacES:

AirPac ES, as in Event Services, was created just for the special event and entertainment industries! We know your comfort conditioning equipment needs are different from those of a contractor on a construction site. So your temporary air conditioning and heating solutions should also be different!

- ✓ Clean, reliable equipment
- ✓ Dependable delivery and set up
- ✓ Professional “day of event” services

Discerning Event Planners, Equipment Suppliers and Venue Managers trust AirPac to comfort-condition their special event tents.



Special event tent air conditioning.

Any Tent. Any Place. Any Time.

Share this Ebook



Introduction



Many people opt to have their special event in a tent. There are many types of tents to choose from and each structure can be transformed into a magical environment. Picture the tent as a blank canvas just waiting to be created. You select a theme to guide the overall creative genius and coordinating menu that will enchant your guests and make your event memorable.

Now that you have created the magic, don't leave the comfort inside the tent to chance. What happens if you have a scorcher of a day? Or one of those wickedly hot and humid mid-summer heat fests? What then? Just because a tent can protect you and your guests from the rain and sun, doesn't mean your environmental concerns are over.

Special event tent air conditioning will guarantee the comfort of your guests, ensure food safety and preserve floral and display decorations throughout the event.

Just as there are many different tents and venues, there are many different ways to air condition tents. **This guide will walk you through the various methods of tent air conditioning so you will be able to choose the method that works best for your event, venue and budget.**

Let's get started!

Share this Ebook



Chapter 1

Trailer Mounted Unit Ducted Cold Air

AirPac Inc, [Event Services](#)

Share this Ebook



Trailer Mounted Unit – Ducted Cold Air

Simply put, the **Trailer Mounted Unit – Ducted Cold Air Method** is the easiest and typically the most economical way to air condition a tent. Rental companies often use a converted roof-top air conditioning unit mounted on a trailer.



The cold air is delivered to the tent through air ducts that are attached to the air conditioner on the trailer and then attached to a diffuser device or louver inside the tent.

These are the different options for terminating the duct and distributing air inside the tent.

Share this Ebook



Duct options



Option 1

Cold air duct is attached to a tent support and has no louver to direct the cold air within the tent.



Option 2

Cold air duct is attached to a register or grille that is an integral part of a hard wall tent.



Option 3

Cold air duct is attached to a register or grille that is integrated into the tent sidewall and decorated on the interior.

Share this Ebook





Option 4

Cold air duct is attached to a register or grille at a neutral separation in the tent sidewall.



Option 5

Cold air duct is attached to a fabric duct system inside the tent and diffused into the space along the length of the duct.

The **Trailer Mounted Unit – Ducted Cold Air Method** works and will deliver cool, dehumidified air into the tent but it won't be a pretty site.

Share this Ebook





Inexpensive solution – this is the cheapest way to air condition a tent.

Quick set-up – trailer can be driven into location and the unit is set in place.

Fewer power and air duct connections.

100% outside air provides continual air change and positive air pressure.



Large physical size – can be hard to position and even damage grass and patios.

Single point of failure – if there's a problem you have NO air conditioning.

Difficult to move into place around the tent structure.

Unsightly duct installation and long duct runs.

Loud mechanical and air noise.

Difficult to set tent temperature 20° lower than outside air.

Share this Ebook



The bottom line:

You probably won't have an award winning installation with the **Trailer Mounted Unit – Ducted Cold Air Method** but you'll have cool, conditioned air.

To minimize the noise and visual impact, the air conditioning unit can be placed away from the tent but doing this means longer duct runs and more lost cooling making the entire system more inefficient.

“Best for tents from 40' wide and greater installed on open-access, flat terrain.”



Share this Ebook



Chapter 2

Packaged Unit Ducted Cold Air

AirPac Inc, [Event Services](#)

Share this Ebook



Packaged Unit – Ducted Cold Air

The **Packaged Unit – Ducted Cold Air Method** is similar to the Trailer Mounted – Ducted Cold Air Method but the air conditioning unit is smaller in physical size and has less cooling capacity.

Rather than having one huge air conditioner mounted on a trailer, the air conditioning is provided by smaller units positioned closer to the tent.



Share this Ebook



Since the smaller units are easier to place around the tent, the air conditioners can be distributed along two or three sides of the tent. Closer air conditioner placement results in shorter duct runs and better air distribution throughout the tent.



Noise is reduced since the noise is coming from multiple units in a scattered approach and cool air is distributed. Still have to deal with visual impact in addition to air and unit noise.



To finish the ducting and deliver the cold air to the interior of the tent there is typically a panel placed in a natural seam in the tent's sidewall to attach the supply and return duct. This panel will typically have adjustable, directional discharge louvers and a return air register.

Share this Ebook



Duct options



Option 1

Cold air duct is attached to a tent support and has no louver to direct the cold air within the tent.



Option 2

Cold air duct is attached to a register or grille that is an integral part of a hard wall tent.



Option 3

Cold air duct is attached to a register or grille that is integrated into the tent sidewall and decorated on the interior.

Share this Ebook





Option 4

Cold air duct is attached to a register or grille at a neutral separation in the tent sidewall.



Option 5

Cold air duct is attached to a fabric duct system inside the tent and diffused into the space along the length of the duct.

The **Trailer Mounted Unit – Ducted Cold Air Method** works and will deliver cool, dehumidified air into the tent but it won't be a pretty site.

Share this Ebook





Better air distribution by placing air conditioning units on multiple sides of the tent.

Shorter duct runs allow for less air and energy loss.

Reduced noise level since the air conditioning units are distributed around the tent.

No single point of failure – if one unit stops working, you still have other air conditioners.



Can be difficult to put units in place and may require material handling equipment.

May require alteration to tent sidewalls for the cold air delivery ducts and plenums.

Air distribution inside the tent is limited by placement of outdoor air conditioning units.

Visual impact on multiple sides of the tent.

Share this Ebook



The bottom line:

The **Packaged Unit – Ducted Cold Air Method** allows for greater flexibility with unit placement and air distribution within the tent but it can be tricky to install the cold air duct tent transitions into the side wall of the tent.

Be sure to place the units on the service side (back) of the tent to minimize visual impact.

“Best for all tent sizes installed on easily accessed, flat surfaces.” •



Share this Ebook



Chapter 3

Packaged unit Wall Mounted Cold Air

AirPac Inc, [Event Services](#)

Share this Ebook



Packaged Unit – Wall-Mounted Cold Air

The **Packaged Unit – Wall-Mounted Cold Air Method** takes the Packaged Unit – Ducted Cold Air Method a step further by getting rid of the cold air duct completely. This method often uses the same packaged units but the air conditioners are installed into the sidewall of the tent. This method will require some modification to the tent sidewall to allow for the cold supply air and return air directly to the air conditioner.



Smaller units allow for a distributed approach but holes in the sidewalls, tent decking, support lines and other factors often limit where the air conditioners can be placed.

Noise is still a factor as these units are designed to be smaller, but not necessarily quieter since the noise is adjacent to the sidewall. Some models also discharge hot condenser air out the back which may be a concern for service areas or traffic flow areas where guests will be walking.

Share this Ebook





Better air distribution by placing air conditioning units on multiple sides of the tent.

No duct is needed for air distribution.

Minimal visual impact on design inside and outside the tent.

No single point of failure – if one unit stops working, you still have other air conditioners.



Can be difficult to put units in place and may require material handling equipment.

Labor and time-intensive installation.

Tent sidewall must be modified for the cold air conditioner installation.

Air conditioning units may need to be positioned before the tent is installed because of ballasts or tie-downs.

Air distribution inside the tent is limited by placement of outdoor air conditioning units.

Mechanical and air noise may be a factor since the air conditioner is integrated into the sidewall.

Share this Ebook



The bottom line:

The **Packaged Unit – Wall-Mounted Cold Air Method** allows for flexibility with unit placement and air distribution within the tent but it requires planning prior to installation to make sure air conditioning units can be placed properly for maximum cooling and minimum visual impact.

“Best for all tent sizes installed on easily accessed, flat surfaces. May require sidewall modifications and decoration.”



Share this Ebook



Chapter 4

Split Unit Ductless Cold Air

AirPac Inc, [Event Services](#)

Share this Ebook



Split Unit – Ductless Cold Air Method

The **Split Unit – Ductless Cold Air Method** uses a split air conditioning system – the two inter-connecting indoor and outdoor sections allow for greater versatility in any special event tent.



No tent side walls have to be modified and the units can literally be placed anywhere. The compact outdoor section can be easily placed in tight spots and with no worry of damage to grass surfaces or patios.

Because of the small size the split units are great for smaller (under 40' wide) tents in any location -- a back yard, landscaped venue, roof-top terraces and parking lots.

These units can go anywhere!

Share this Ebook



These air conditioners are designed with a high energy efficient, super quiet inverter compressor technology and oscillating louvers on the indoor air handler to maximize air delivery and distribution.



An added benefit is the heat pump technology which provides heating AND cooling in an auto-changeover unit. On those two-season days, these units can handle heating in the morning and cooling in the afternoon!



Share this Ebook





No tent sidewall modifications needed.

Can fit in any location.

Better air distribution inside tent with oscillating louvers on indoor unit.

Heat pump allows for cooling AND heating.

Each unit is thermostatically controlled.



Inside air handling unit requires small footprint inside tent.

More expensive comfort conditioning solution.

Share this Ebook



The Bottom Line:

The **Split Unit – Ductless Cold Air Method** allows for design flexibility and maximum comfort control.

“Best for tent sizes up to 50’-60’ on any surface and elevation.”



Share this Ebook



Chapter 5

Split Unit

Ductless Cold Air with Remote Condenser

AirPac Inc, [Event Services](#)

Share this Ebook



Split Unit – Ductless Cold Air with Remote Condenser

The **Split Unit – Ductless Cold Air with Remote Condenser Method** uses a split air conditioning system – the two inter-connecting indoor and outdoor sections allow for the greatest versatility when the outdoor section is remote from the indoor section.



No tent side walls have to be modified and the units can literally be placed anywhere. The compact outdoor section can be easily placed in tight spots and with no worry of damage to grassy surfaces or patios.

With a remote installation of the condensing section we can totally hide the outdoor condensing unit

by moving it all the way to the “technical” or back side of the structure. This allows three sides of the structure to be presented without visual impairment, blowing air or noisy units.

Share this Ebook



This is the best method for two-level structures providing a clean installation with no visual impact

Because of the small size the split units are great for smaller (under 40' wide) tents in any location -- a back yard, landscaped venue, roof-top terraces and parking lots —these units can go anywhere.



These air conditioners are designed with a high energy efficient, super quiet inverter compressor technology and oscillating louvers on the indoor air handler to maximize air distribution.

An added benefit is the heat pump technology provides heating AND cooling in an auto-changeover unit. On those two-season days, these units can handle heating in the morning and cooling in the afternoon!

Share this Ebook





Outdoor section can be installed anywhere for presentation on 3 tent sides.

Easily installed with glass panels and two-level structures.

No tent sidewall modifications needed.

Can fit in any location.

Better air distribution inside tent with oscillating louvers on indoor unit.

Heat pump allows for cooling AND heating with automatic thermostat control.



Qualified AirPac technician required for installation.

Inside air handling unit requires small footprint inside tent.

More expensive comfort conditioning solution.

Share this Ebook



The Bottom Line:

The **Split Unit – Ductless Cold Air with Remote Condenser Method** allows for ultimate design flexibility and maximum comfort control.

“Best for tent sizes up to 50’ on any surface and elevation, including two-level structures.”



Share this Ebook



Additional Resources

Ready to rent tent air conditioning for your next event?

The first step is figuring out [how much air conditioning you need to cool the tent.](#)

Here's some help figuring out [how much tent air conditioning will cost.](#)

Not sure if you need air conditioning or heating for those shoulder-season events? [AirPac's GERO units offer cooling and heating from the same unit.](#)

Get a quote



Share this Ebook

