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GUARANTEED QUALITY WITH UNMATCHED SERVICE

Our commitment to quality control extends beyond our manufacturing plant. We are also committed to continually improving our product line by actively participating in design and engineering. Our products undergo constant evaluation through consultations with contractors, builders, and distributors. In addition, we offer technical training and on-site inspections to ensure the success of our customers.

Understanding the needs of builders and providing solutions to those needs has been the hallmark of our operation since day one. Our products are designed to meet the requirements and needs of the customer, not our own. Special design applications are a challenge for us, not a problem. These are the reasons why WTF is a leader in developing solutions through new designs.

Quality is very important...it is the impression we leave.

Beautiful finish..."This formwork attracted me because it has the sheet metal inserted, which gives it strength and prevents the sheet metal from bending and separating at the corners. These formworks give a beautiful finish to the concrete. A panel of

concrete. A panel of 090 x 2.70 m can be carried by one person, which means that with less personnel I can finish the cycle of unloading, assembling the formwork and removing it. We have discovered that we can have the impossible triangle of good, fast, and profitable.

" --- Larry Swearingin, Lawson, MO

Quality in manufacturing... "In the last 27 years, I have bought and used aluminum formworks from various manufacturers. In all aspects, Wall-Ties & Forms' formwork equipment is superior,

from its manufacturing to its use on the job, compared to any other formwork equipment I have used." ---Curt Fields, Raleigh-Durham, NC

Innovation... "With 30 years of experience as a distributor of concrete equipment, I can say that WTF is the most innovative company in the formwork industry.



WTF's ability and willingness to design according to the needs of its customers is unparalleled." --- John Hess, Belleville, IL



Wall-Ties & Forms, Inc. manufactures its products at its 10,000 m2 Industrial Plant located in Bonner Springs, KS. WTF uses advanced robotic technology, fiber optics, and the latest in computing to produce the highest quality products at a competitive price.



WHY CONSIDER WTF'S ALUMINUM FORMWORK

BENEFITS IN LABOR

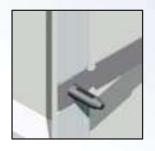
Lightweight Aluminum The formworks are made of lightweight aluminum, which allows large components to be manageable.



Simplicidad

Un sistema simple de pasadores, cuñas, y separadores es utilizado para montar las cimbras. Esto permite que mano de obra no especializada pueda ser capacitada rápidamente en el uso de estos equipos. (ver pág. #32). También ofrecemos el WTF Pasador Fijo (ver pág. #34).







Speed The system is fast. It is not uncommon for a contractor to double or triple the output of their concrete form crews when they convert from a wood faced form system to WTF forms. Faster production, cost efficiency, and more attractive walls caused Tom Schreivogel and his son-in-

law, Brian Hladik, to abandon wood forms for concrete forms. "The handwriting was on the wall," says Schreivogel.







WHY CONSIDER WTF CONCRETE FORMS?

LONG LIFE OF CONCRETE FORMS

OUR DESIGNS REVOLUTIONIZED THE INDUSTRY!

WTF is committed to engineering and manufacturing the best, strongest, most durable concrete forming systems available in the marketplace. The key to our success and your satisfaction is our strict adherence to a basic business principle: Products are designed and built to fit your needs

Estimados Ross & Orval

Ecxturas de taumio, estoy seguro que esas em buenos muros colados para sus nuevos dueños.

servicio recibido ha sido excelente.

Sinceramente,

Dennis I., Richards, President

Esta carta ex en referencia al juego de cimbras de Aluminio texturados fie estado construyendo aproximadamente unas 150 unidades de viviendas cimbras han recibido un mumo de mantenimiento y todavia le quedan

por año. Esto estaría sumando un total de usos de 2,700 olados. Mis mucha vida úni con muchos colados. Hace aproximadamente tres meses.

cimbras han recibido un minimo de mantenimiento y todavia le quedan en una transacción con un distribuidor de Wall-Ties "Carroll Distribuitog" en una cimbras como narie de nago recibiendo anroximadamente."

en una transaccion con un distribuidor de Wall-Ties "Carroll Distributin lo que el equipo de cimbra me había costado hace 18 años.

Con este juego de cimbras he obtenido mejor resultado que lo que se nodría obtener con otras cimbra de aluminio que nude observar y no Con este juego de cimbras he obtenido mejor resultado que lo que se tengo dudas de que las cimbras de aluminio que pude observar y no competidores quedas de fabricación en el mercado de hoy. Muchos de mis con de mis que pude observar y no competidores quedaron impresionados con el resultado que he obtenido la mejor calidad de fabricación en el mercado de hoy. Muchos de mis competidores quedaron impresionados con el resultado que he obtenido nis cimbras, que hasta el día que se los entregue a Carroll, todavia competidores quedaron impresionados con el resultado que he obtenido continuaban produciendo muros colados de concretos con una atractiva Con mis cimbras, que hasta el día que se los entregue a Carroll, todavía lexturas de ladrillo. Estoy senuro que exas cimbras siguen produciendo de concretos con una atractiva de ladrillo. continuaban produciendo muros colados de concretos con una atractiva texturas de ladrillo. Estoy seguro que esas cimbras siguen produciendo buenos muros colados nara sus nuevos dueños.

Volvi a adquirir un juego de cimbras de aluminio con textura pero esta altura en la construcción de viviendas. Pueden considerame un cliente de Carroll de Wall-Ties satisfecho, El equipo me ha resultado bien y el altura en la construcción de viviendas. Pueden considerame un cuente de Carroll & Wall-Ties satisfecho. El equipo me ha resultado bien y el

Minimal Maintenance

With minimal maintenance, it is not unusual for a contractor to get 1,000, 2,000 or as many as 3,000 uses with the WTF concrete form.

Longevity

The increased longevity of our forms was accomplished by examining the weaknesses of other form systems and making them our strengths.

WTF founders repaired many forms and

discovered four common weaknesses. We then

designed our forms to improve or solve those weaknesses.

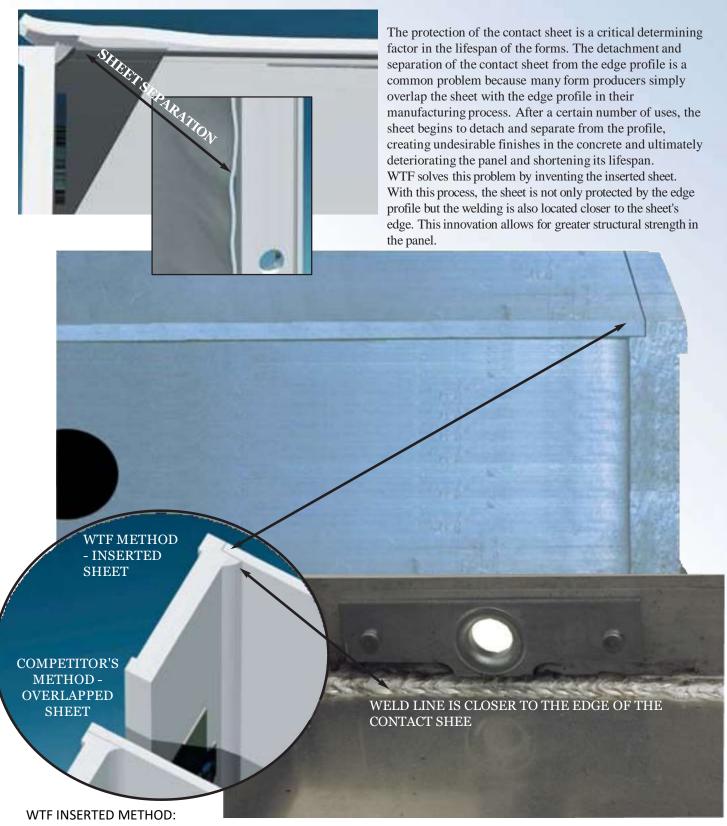
When looking at concrete form systems, there are four areas to evaluate

before making your form purchase decision:

Face Sheet Protection	Welding Life Span
Strength of the protective cap	Reinforcement Profile Construction

The following pages present some examples of weaknesses from other formwork systems that WTF turns into attributes.

CONTACT SHEET PROTECTION

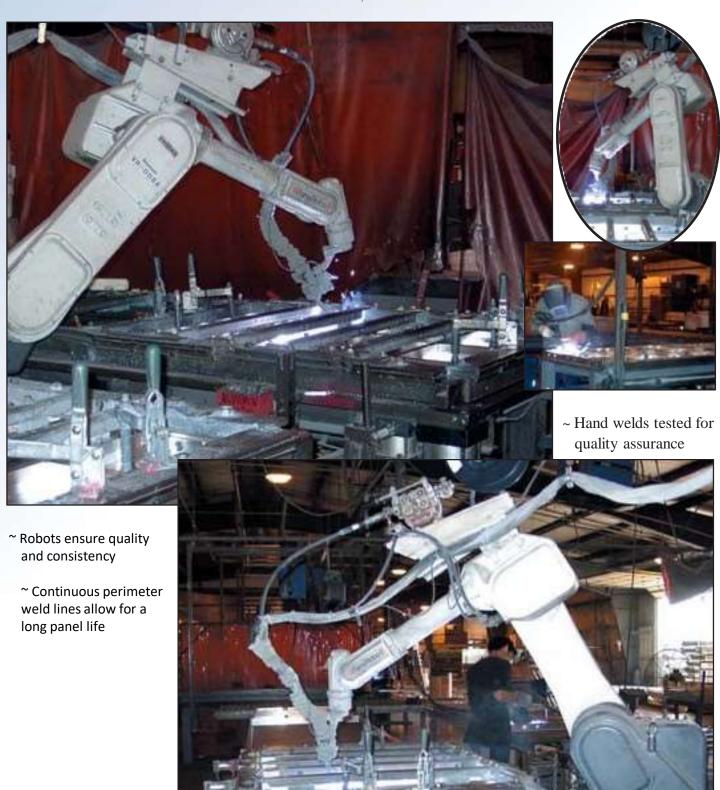


- ~ Increases the strength of the connection with welding closer to the edge of the contact sheet.
- ~ Prevents damage and wear on the edges.
- ~ Allows for a uniform finish on the walls.



WELD LIFE

WTF has extended the life of welds by using a state-of-the-art robotics welding system on full panels. These panels receive the most concrete placement pressure. A soft alloy weld wire is utilized in the weld process. This ensures greater flexibility without sacrificing strength when the concrete form is in use. This greatly reduces, not eliminates, broken welds.





PROTECTION CAP STRENGTH

Protection caps are extremely important elements to be considered when purchasing aluminum formwork systems. The function of these caps is to protect and prevent wear and tear and breakage in the connection holes that come with the side profiles of the formwork panels. Weak or malfunctioning protectors cause the holes in the profiles to wear, become damaged, and enlarge, resulting in high repair costs and significantly reducing the lifespan of the formwork. WTF's designed and manufactured protection cap has been in use since 1979 and has not been changed because it fulfills its function satisfactorily.

Wall-Ties uses a 4¾" tempered steel protection cap with an anti-corrosive treatment and punched crown. The cap is

made of solid steel and is installed using high-strength 1/4" rivets, the largest size used in the Industry. The rivet

head is flattened to facilitate cleaning of the edge profile. WTF guarantees that its caps last as long as or longer than its own panels.

- ~ The 4 3/4" steel cap allows for pressure distribution
- ~ High-carbon steel increases tensile strength, reducing wear and tear and flaring in the connection pin holes. The cap also protects the side profile from cracking and fracturing.
- ~ 1/4" steel rivet with anti-corrosive treatment ensures the cap stays in Place.



The punched crown cap allows for easier assembly and disassembly of the wedge because there are only two contact points.



WTF RIVETS

- ~ 1/4" solid steel rivets ensure long-lasting protection caps.
- ~ The rivet heads are flattened to facilitate cleaning of the side profile.

EXTRUDED ALUMINUM SIDE PROFILE

- ~ Cut to receive the inserted sheet
- ~ Double contact ~ Easy to clean

MOUNTED CAP WTF uses mounted caps in extruded joints (30 cm and smaller). These caps are available in larger panels when required. WTF uses the roll-over method in placing the mounted caps.



Rivet head flattened to Easy to clean.





STRUCTURAL REINFORCEMENTS IN FORMWORK PANELS

The design and manufacture of structural reinforcements are extremely important to prevent an increase in the weight of the panel. Weight increase due to concrete accumulation can occur when concrete seeps into the open-channel horizontal reinforcement profiles used by some formwork manufacturers. The weight increase shortens the lifespan of the formwork and increases the risk of physical injury to workers. WTF does not use open profiles (channels); their reinforcements are made with tubes and closed-section profiles in their support structure, eliminating the possibility of weight increase due to concrete seepage and accumulation. Additionally, WTF uses textured profiles to facilitate the handling and manipulation of the panels.



REINFORCEMENT STRUCTURE.

STANDARD AND SPECIALIZED FORMWORK



7" spacing between horizontal braces

20 cm SPACING BETWEEN HOLES FOR MOUNTING PINS ON SIDE PROFILES This hole pattern makes the 8-8 / 8-24 ideal in markets converting from block to poured walls. This allows the contractor to easily accomplish 8" jumps.

- ~ Widths from 36" 1"
- ~ Heights up to 120"
- ~ Standard face sheet thickness .125
- ~ Also available in .115
- ~ Brace is a 1 x 2 tube
- ~ 36" x 96", .125 thickness weighs 84#
- ~ 36 " x 108", .125 thickness weighs 90

INSERTED CONTACT SHEET Protects

- * the edges of the sheet from damage and wear.
- * The location of a continuous weld line very close to the edge of the sheet allows for superior structural penetration.
- * Increases the strength and lifespan of formwork without leaving marks.
- *Corners are reinforced with specially welded plates.

REINFORCEMENT BARS

- * Reinforcement bars or profiles have closed sections, preventing concrete from seeping and accumulating inside.
- * The reinforcement bars are welded on the sides and ends, adding structural strength and sealing possible seepage points.
- * The bars have a serrated texture that allows for better handling and operation without accumulating concrete.

SIDE PROFILE Extruded

- * high-strength aluminum profile ensures a long lifespan for the panel.
- * A double contact line on the profiles facilitates panel alignment.
- * Rebate lines to insert the sheet into the profile increase panel strength.

PROTECTIVE CAP



- * The sleeves are made of solid tempered steel with anticorrosive treatment and are attached to the profiles with high-strength solid steel rivets, treated with 1/4".
- * Sleeves with die-cut crowns facilitate the assembly and disassembly of the wedges.
- * WTF sleeves increase the lateral strength of the profiles instead of weakening them as in other cases.
- * Rivets are flattened, leveled, to the profile to reduce concrete buildup and facilitate cleaning.

WELDING

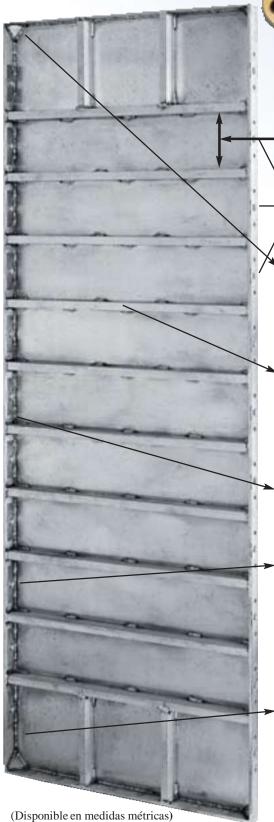
Welds are continuous lines around the perimeter, including the top of the reinforcing bars.

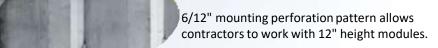
Large panels have computerized robotic welding ensuring quality and consistency.

Our welding is certified with a quality control program. Regenerate response



8-8





- ~ Widths range from 1" to 36" or 2.5 to 90 cm.
- ~ Heights up to 120" or 3 meters.
- ~ Standard contact sheet thickness is .125 or
- ~ Also available in .115 or 2.9 mm.
- ~ .90 m. x 2.40 m., with 3.1 mm. sheet weighs
- \sim .90 m. x 2.70 m., with 3.1 mm. sheet weighs 46 kg.

INSERTED CONTACT SHEET

- * Protects the edges of the sheet from damage and wear.
- * The location of a continuous welding line very close to the edge of the sheet allows for superior structural penetration.
- * Increases the strength and lifespan of the formwork without leaving marks.
- * The corners are reinforced with specially welded plates.

REINFORCEMENT BARS

- * 5" channel reinforcement profiles are of closed section, preventing concrete from leaking and accumulating inside.
- * The reinforcement bars are welded along their length and at the ends, adding structural strength and sealing potential leakage points.
- * The bars have a serrated surface for better handling and operation without accumulating concrete.

SIDE PROFILE

- * Extruded aluminum high-strength profile ensures a long panel lifespan.
- * A double contact line on the profiles facilitates panel alignment. Recessed lines for inserting the sheet into the profile increase panel strength.

PROTECTIVE CAP

- * Caps are made of tempered solid steel with anticorrosive treatment and are fastened to the profiles with high-strength solid steel treated 1/4" rivets.
- * Caps with punched crowns facilitate the assembly and disassembly of wedges.
- * WTF caps increase the lateral profile strength instead of weakening it as in other
- * Rivets are leveled with the profile to reduce concrete buildup and facilitate cleaning.

- * Welds are continuous lines around the perimeter, including the top of the reinforcement
- * Large panels have computerized robotic welding to ensure quality and consistency.
- * Our welding is certified with a quality control program.



(Available in metric measurements..) 6-12

6-12

All panels are manufactured to last. In addition to the 6/12, we also offer the 6/12 double bar. This new version is made with double 1" x 2" tubes, weighs less, and is easier to handle.

- ~ Widths from 1" 36" or 2.5 to 90 cm.
- ~ Heights up to 120" or 3 meters.
- ~ Standard contact sheet thickness of .125 or 3.1 mm
- ~ Also available in .115 or 2.9 mm.
- ~ Reinforcements are 1 x 2" or 2.5 cm x 5.0 cm
- \sim .90 m x 2.40 m, with 3.1 mm sheet weighs 40 kg.
- \sim .90 m x 2.70 m, with 3.1 mm sheet weighs 44 kg.

17.78 cm spacing between horizontal reinforcements

INSERTED CONTACT SHEET

- * Protects the edges of the sheet from damage and
- * The location of a continuous welding line very close to the edge of the sheet allows for superior structural penetration.
- * Increases the strength and lifespan of the forms without leaving marks. The corners are reinforced with specially welded plates.



- * The reinforcement channels are closed to prevent concrete from seeping and accumulating inside them.
- * The reinforcement bars are welded along the length and at the ends, adding structural strength and sealing possible leak points.
- * The bars have a serrated surface that allows for better handling and operation without concrete buildup.

SIDE PROFILE

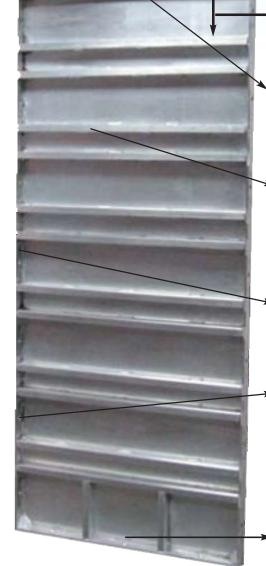
- * Extruded aluminum profile of high strength ensures a long lifespan for the panel.
- * A double contact line on the profiles facilitates panel alignment.
- * Groove lines for inserting the sheet into the profile increase panel strength.

PROTECTIVE CAPS

- * The caps are made of solid steel tempered with anticorrosive treatment and are fastened to the profiles with 1/4" solid steel high-strength rivets.
- * Caps with stamped crown facilitate the assembly and disassembly of the wedges.
- * WTF caps increase the strength of the lateral profiles instead of weakening them as in other cases.
- * The rivets are flattened and leveled to the profile to reduce concrete buildup and facilitate cleaning.

WELDS

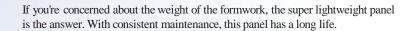
- * The welds are continuous lines around the perimeter including the top of the reinforcement bars.
- * Large panels are robotically computer-welded to ensure quality and consistency.
- * Our welds are certified with a quality control program.



Available in metric measurements.







Available in:

- ~ 36" x 120" or .90 x 3.00 m. weighs only 90# or 40.9 kg.
- ~ 36" x 108" or .90 x 2.70 m. weighs only 81# or 36.8 kg.
- ~ 36" x 96" or .90 x 2.40 m. weighs only 73# or 33.1 kg.

Contact sheet insert:

- * Protects the edges of the sheet from damage and wear.
- * The location of a continuous weld line close to the edge of the sheet allows for superior structural penetration.
- * Increases the strength and life of the forms without leaving marks.
- * A central reinforcement is used to reduce deflection.
- * Corners are reinforced with specially welded plates.
- * The .094" or 2.8 mm sheet comes with impact-resistant plates.

Reinforcement channel profiles:

- * The reinforcement channels are welded along the length and at the ends, adding structural strength and sealing potential leakage points.
- * Three corrugated lines provide rigidity to the horizontal reinforcements.

Lateral profile:

- * Extruded aluminum profile of high strength ensures a long panel life.
 - * A double line of contact on the profiles facilitates panel alignment.
 - * Recessed lines for inserting the sheet into the profile increase the panel's strength.

Protective caps:

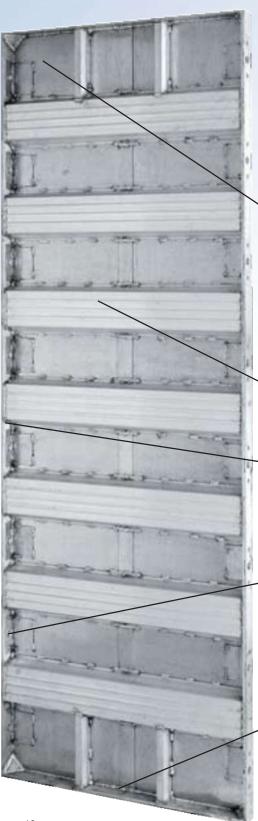
- * The caps are made of solid tempered steel with anticorrosive treatment and are fixed to the profiles with high-strength 1/4" treated solid steel rivets.
- * Caps with die-cut coronas facilitate the assembly and disassembly of wedges.
- * WTF caps increase the strength of the lateral profiles instead of weakening them, as in other cases
- st Rivets are flattened and leveled to the profile to reduce concrete accumulation and facilitate cleaning.

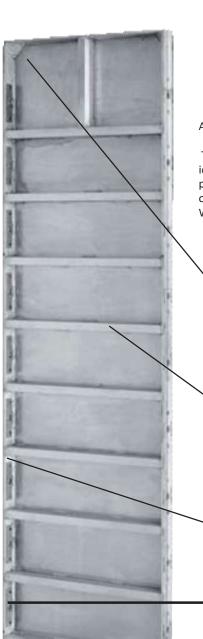
Welds:

- * Welds are continuous lines around the perimeter, including the top of the reinforcement bars.
- * Our welding is certified with a quality control program.



(Available in metric measurements.)







Accurate and reliable...

This formwork system is designed to minimize deflection and flatness defects in concrete walls. It is ideal for commercial constructions that demand flat and deflection-free walls. In this system, the panels are very strong and compact, with a maximum width of 24" or 60 cm and come with a .156" or 4 mm contact sheet. With an 8" or 20 cm assembly pattern. This commercial panel is used in the WTF International housing construction system and the SecureTech Building System.

- ~ Width up to 60 cm. ~ Height up to 3.0 meters. ~ Reinforcement tube 2.5 x 5 cm.
 - ~ 4 mm contact sheet the thickest contact sheet on the market
- \sim 0.60 x 2.40 meters weighs 29 kg. \sim 0.60 x 2.70 meters weighs 32 kg.

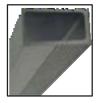
Metric measurements

INSERTED CONTACT SHEET

- * Protects the edges of the sheet from damage and wear.
- * The location of a continuous weld line very close to the edge of the sheet allows for superior structural penetration.
- * Increases the strength and lifespan of the formwork without leaving marks.
- * The corners are reinforced with specially welded plates.

REINFORCEMENT BARS

- * The reinforcement bars or profiles are of a closed section, preventing concrete from leaking and accumulating inside the bars.
- * The reinforcement bars are welded on the sides and ends, adding structural strength and sealing possible leakage points.
- $\ ^*$ The bars have a serrated roughness that allows for better handling and operation without accumulating concrete.



SIDE PROFILE

- * Extruded aluminum profile of high strength ensures a long lifespan of the panel.
- * A double contact line on the profiles facilitates panel alignment.
- * Groove lines for inserting the sheet into the profile increase the panel's strength.

PROTECTIVE CAP



- * The caps are made of solid steel tempered with an anti-corrosive treatment and are attached to the profiles with 1/4" solid steel high-strength rivets.
- * Caps with punched crowns facilitate nail assembly and disassembly.
- * The WTF caps increase the strength of the side profiles instead of weakening them as in other cases.
- * The rivets are flattened and leveled with the profile to reduce concrete accumulation and facilitate cleaning.

WELDS

- * The welds are continuous lines around the perimeter, including the top of the reinforcement bars.
- * Our welding is certified with a quality control program.

These panels come with a stripping angle when used in monolithic pours. This angle facilitates the process of dismantling and stripping the panels.















SMOOTH BRICK

BRICK WITH HORIZONTAL TEXTURE

VERTIBRICK









Designed for those who want more options

Looks like brick... feels like brick. WTF's brick-textured forms provide a natural and durable

appearance. Their application is usually residential and commercial, leaving a textured surface that can receive a light finish and paint directly. Textured panels are compatible with smooth ones and can be cast with one smooth side and one brick-textured side.

Smooth Brick, Textured Brick and VertiBrick

All of our textured forms leave a deep and well-defined design with a finish that closely resembles real brick.

- ~ Widths from 0.025 meters to 0.90 meters.
- ~ Heights up to 2.70 meters.
- ~ Available in any mounting pattern

15-30,

20-20.

~ Vertical texture forms are available in metric measurements.

REINFORCEMENT BARS

- •The reinforcement bars or profiles are of a closed section, preventing concrete from leaking and accumulating inside the bars.
- * The reinforcement bars are welded on the sides and ends, adding structural strength and sealing potential leakage points.

SIDE PROFILE

- * Extruded aluminum profile of high resistance ensures a long life to the form.
- * Exposed corners are filled to reduce concrete buildup.

PROTECTIVE SLEEVE

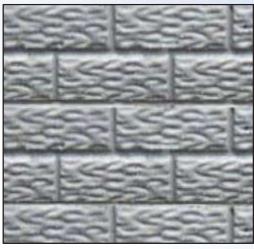
- •The sleeves are made of solid, tempered steel with anti-corrosion treatment and are fastened to the profiles with 1/4" high-strength solid steel rivets.
- * Sleeves with die-cut crowns facilitate the assembly and disassembly of the wedges.
- * WTF sleeves increase the strength of the lateral profiles instead of weakening them as in other cases.
- ${}^{\bullet}\text{The rivets}$ are flattened and leveled to the profile to reduce concrete buildup and facilitate cleaning.

WELDING

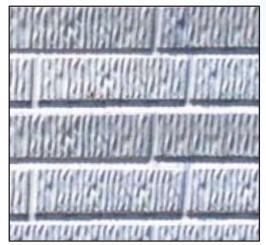
- * The welds are continuous lines around the perimeter, including the top of the reinforcing bars.
- * Our welding is certified with a quality control program.



SMOOTH BRICK



TEXTURED BRICK



VERTIBRICK





- ~ 15 cm wide and less than 13.9 cm deep when assembled.
- ~ Comes with a top and bottom aligner that are permanent in the system (Patent Pending).
- ~ Uses reusable steel cone rod spacers.
- ~ Available in smooth, smooth brick texture, horizontal texture, and vertical texture panels.
- ~ Lever arms, rod spacers, and scaffold supports are fixed and kept as part of the paneling.
- ~ The assembly system is simple.
- ~ The 15-30 cm and 20-20 cm mounting pattern is maintained for ease of adjustment.
- ~ Only two rod spacers with cones are required for heights up to 3 meters.
- ~ Special additional spacers are used for heights above 3 meters.
- ~ Weighs less than 31 kg per square meter fully assembled with accessories.

WTF panel adapters allow contractors to create their paneling using 90 cm wide aluminum panels.



The WTF panel adapter allows the contractor to assemble several individual panels and create a large panel. This system can be used to cast walls with heights of 2.40, 2.70, and 3 meters, requiring only 2 rod spacers and cones in the adapters.



The panel adapter, due to its compatibility, allows for easy transition with manually operated panels using pins and wedges.

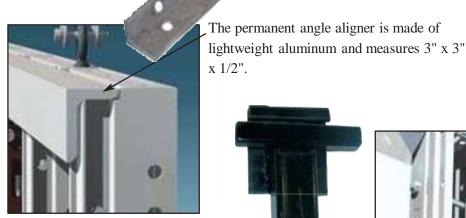


The assembly of the system is very simple and requires few tools. The adapters are mounted to the wall panels using wrenches and bolts provided by WTF.

To secure two wall panels on both sides of the panel adapter, an 8" bolt is used.

At the ends of a paneling, a 2" bolt is used to secure one side of a panel to one side of the adapter.

The Angle Aligner Profile - this piece is manufactured according to the width of the panelized formwork and is used to ensure correct alignment of the component panels. This aligner is mounted along the top and bottom of the paneling.



Once the paneling is assembled, it weighs less than 35 kg per square meter.





The scaffold support is easily mounted and does not require any loose accessories.





Impressively Large and Fast...

As the name suggests, this formwork is manufactured in a single large piece. The WTF large panel is ideal for the repetitive casting of tall walls.

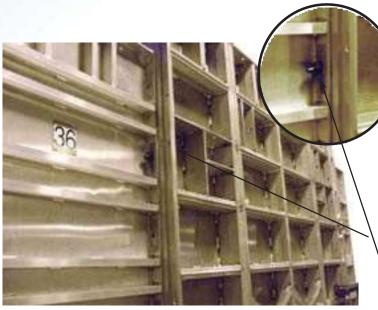
Available in:

- ~ 2.40 m x 2.40 m
- ~ 2.40 m x 2.70 m
- ~ 2.40 m x 3.00 m plus various adjustment and corner sizes
- ~ 4 mm thick contact sheet ensures flat and deflection-free walls
- ~ Weighs less than 31 kg per square meter with all accessories and supports included
- ~ The large panel has a thickness of 43/4".





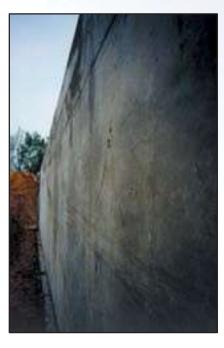








The side profile allows the mounting of manual WTF panels with the large panels using pins and wedges.



- ~ Uses a single piece to form the outer corner.
- ~ The side brackets and accessories are stored in the large panels.
- ~ Reusable cones are used with rod spacers.
- ~ AW Clip is also an aligner.



Agro-industrial project with 5 cm jumps.





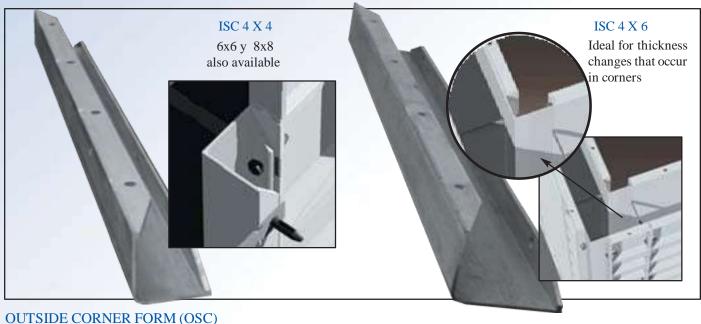


CORNER FORMS

STANDARD CORNER FORMS

INSIDE CORNER FORM (ISC)

- ~ All corners available up to 3 meters in height
- ~ Specify nominal or actual dimension



SINGLE-PIECE OSC

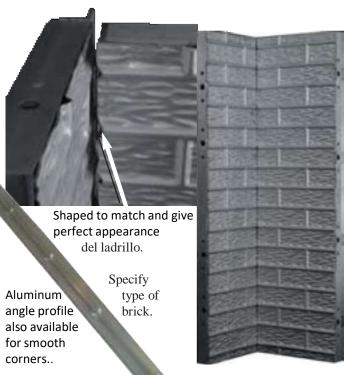
Compared to using "W" forms (see page 21) and two adjustments, the single-piece OSC eliminates a whopping 18 elements per corner.



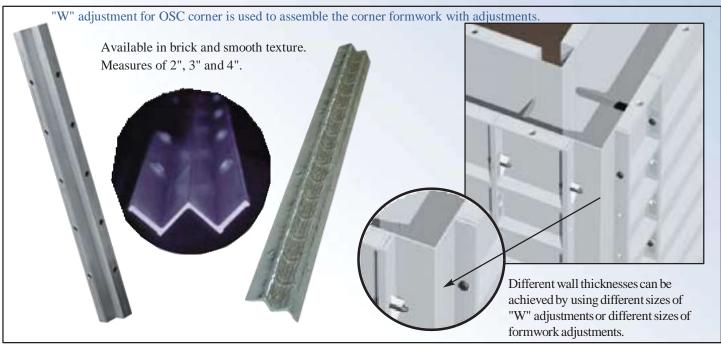


ANGLE-MOUNTED BRICK OSC

Eliminates 9 elements per corner compared to using the three-piece system with the "W" profile and two adjustments.



(W) ADJUSTMENT FOR EXTERIOR CORNER (OSC)



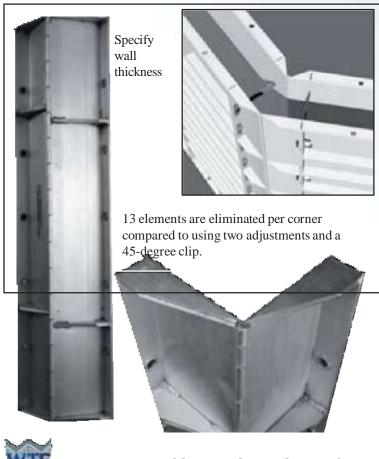
SPECIAL CORNERS

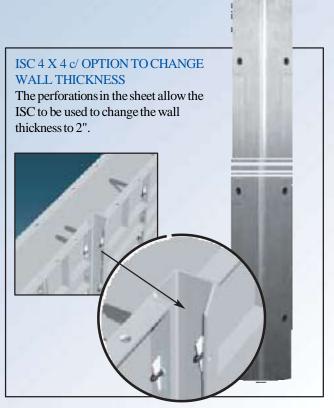
- ~ All corners available up to 3 meters in height.
- ~ Specify nominal or actual size

HINGED INSIDE CORNER (HISC)

The (HISC) can be used together with standard adjustment panels using 45-degree angle clips or HOSC to create bay window-type corner windows Different wall thicknesses can be achieved by using different sizes of OSC panel adjustments.

HINGED OUTSIDE CORNER (HOSC)



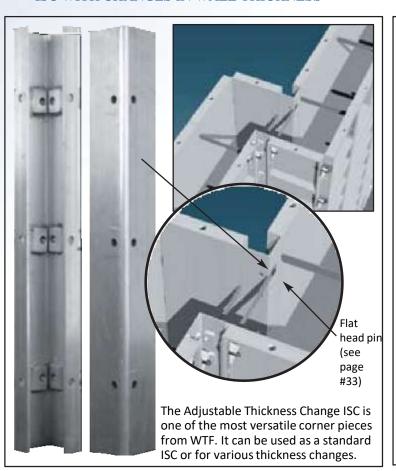


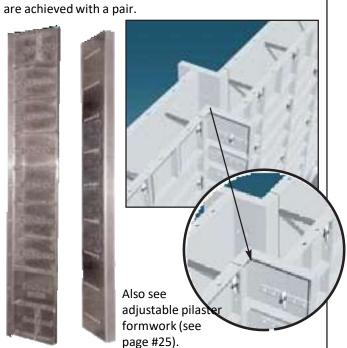


ISC WITH CHANGES IN WALL THICKNESS

ISC WITH ADJUSTABLE CHANGES IN WALL THICKNESS

Note: The Adjustable Change ISC is a single piece. Changes





The Adjustable Change ISC is used to achieve a variety of thickness changes without using varying measurement adjustments. Standard changes are from 6"-14" in 2" increments.



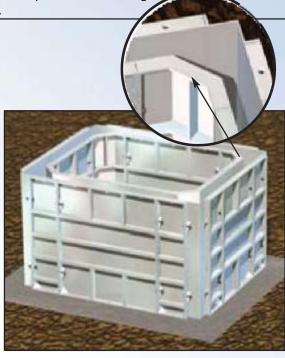
COLLAPSIBLE CORNER

DIAGONAL ISC

The collapsible ISC is ideal for central walls. It works very well with WTF's pan adaptors and with the system of large panels.

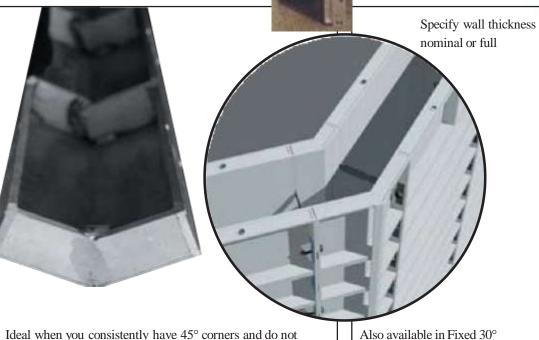


Box Culvert corners are designed to provide the required angle cuts in box culverts and tunnels. These corners are also used in pools and swimming pools.



FIXED 45° ISC

FIXED 45° OSC



Ideal when you consistently have 45° corners and do not need the added flexibility provided by the HISC (see page #21).

Also available in Fixed 30° for ISC and OSC.

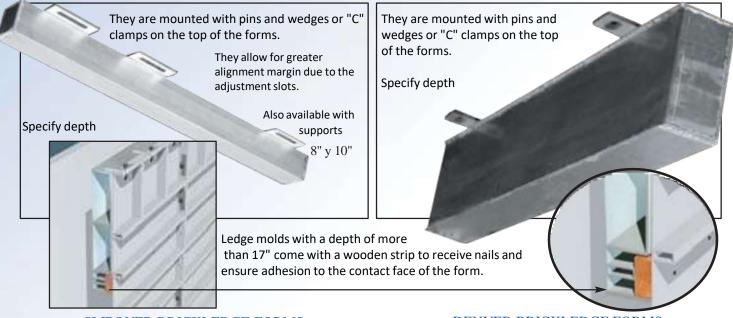


BRICKLEDGE CONCRETE FORMS

Our aluminum brickledge forms are used when adding a brickledge around the outside of a foundation wall.

6" X 6" PLATE BRACKET with 4" SLOT

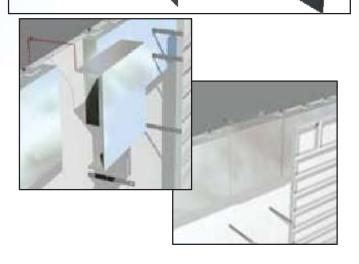
Support ear with 1" elongated holes



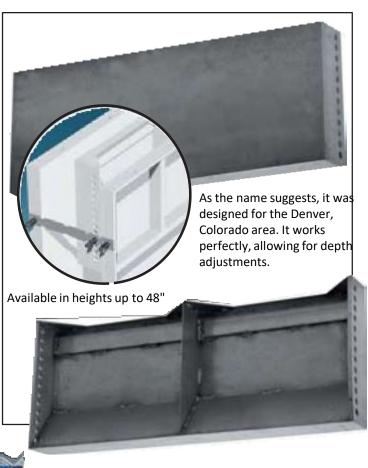
SLIPOVER BRICKLEDGE FORMS



Available in widths up to 24" or 60 cm



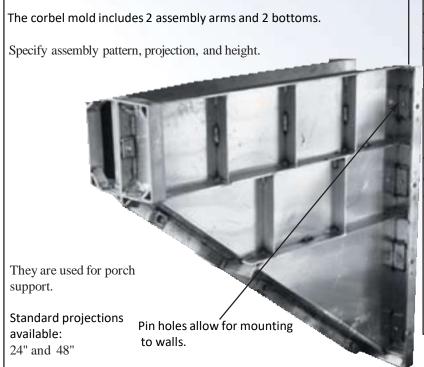
DENVER BRICKLEDGE FORMS



VARIOUS MOLDS

CORBEL MOLD

DOOR FRAME MOLD



The door frame mold creates the opening and the frame for the door. The standard frame is designed with Stanley hinges and locks.

Standard sizes are:

2'8" x 6'8"

3'0" x 6'8"

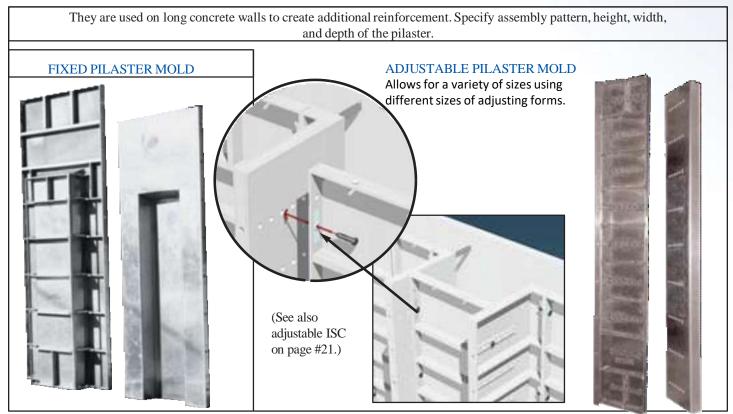
6'0" x 6'8"

The door frame mold can be custom-made with the hinges and locks required by the customer. Specify its use.

Other sizes available upon request.

S

PILASTER MOLDS





MOLDS FOR CIRCULAR COLUMNS

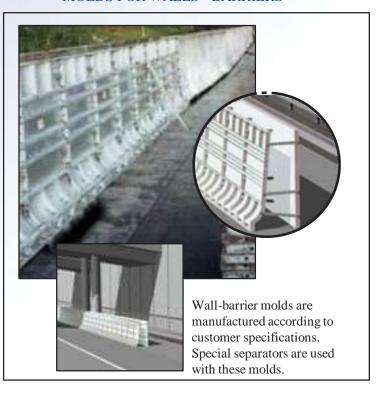
WTF circular column molds are easily stackable and accommodatable for storage or transportation.

Available in heights from 12" to 120".



Available diameters: 10", 12", 14", 16", 18", 20", 22", 24"

MOLDS FOR WALLS - BARRIERS



LARGE COLUMN MOLDS

Molds for larger columns are manufactured according to customer specifications, although the maximum height is 48". These molds can be stacked to create the required height.



RADIAL MOLDS



JUMP FILLERS

PROFILE WITH THICKNESS CHANGE

JOINT CONTROL

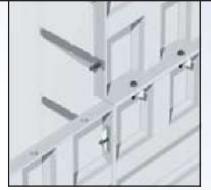
These fillers are built with holes on 1" or 2" centers to allow a contractor to easily achieve different elevation changes

Standard sizes include: 6"

8" 10" 12"

We have other sizes available.

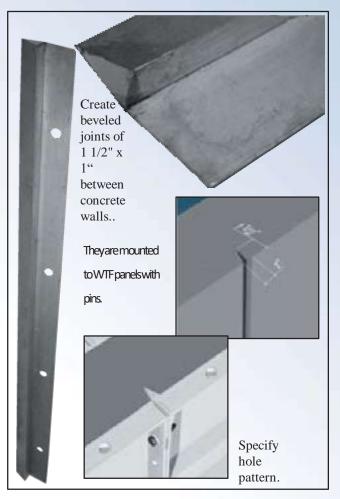
Specify assembly pattern.



Generally used in the agricultural industry.

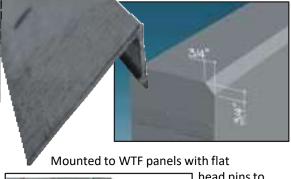


Can be manufactured with thickness changes of 4" for brick ledges.



ALUMINUM CHAMFER STRIP

HORIZONTALLY APPLIED PANELS





head pins to create chamfers of 3/4" x 3/4" on the edges of walls and columns.



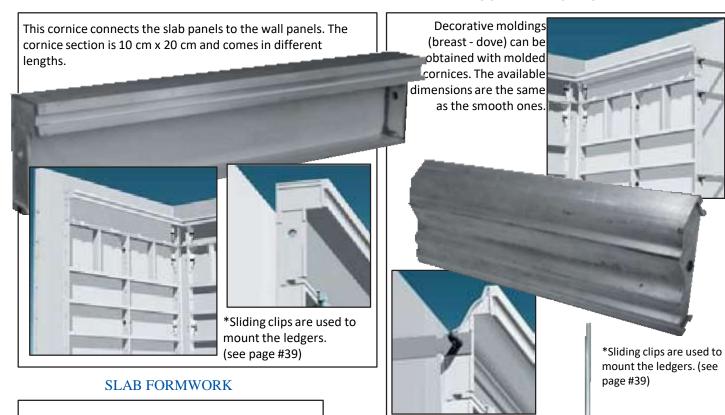
WTF has perfected the horizontal use of standard panels.



SLAB SYSTEM

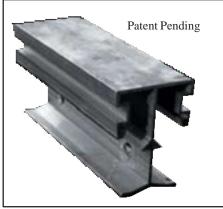
SMOOTH STANDARD CORNICE

CORNIZA MOLDURADA





BEAM OF THE SLAB SYSTEM/PROPS HEAD



STANDARD **PROP**

Our props come equipped with adjustable height threads.

Available in various heights.

Steel head



BEAM



BEAM BAR



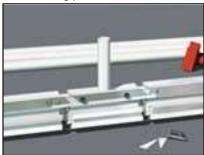


SLABS 28

SLAB SYSTEM ASSEMBLY

The post, beam, and slab panels are designed to offer a wide variety of construction alternatives.

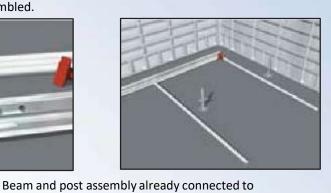
The detachable head, beam bar, and beam assembled using pins and beams.



The beam and slab system head are already fully assembled.



The post is placed in position.



The pre-assembled system of posts and beams is lifted and placed.

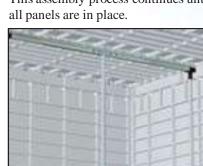


The first slab panel is connected to the beam, post, and cornice assembly using the sliding slab clip.



This assembly process continues until

the cornice and ready to receive slab panels.

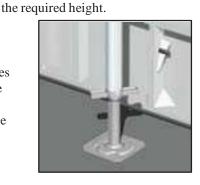


Additional bracing may be required.



Sliding Slab Clip (see p. #39)

Once the concrete is poured and reaches the required minimum setting time, the beam and panel assembly can be disassembled, leaving the posts in place as slab support until the setting time is complete.



This adjustment mechanism allows the post height to be adjustable and adjusted to



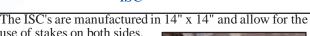
SLABS

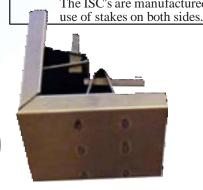
29

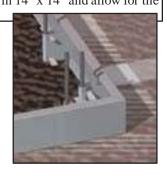
FORMWORK FOR FOUNDATION SLAB









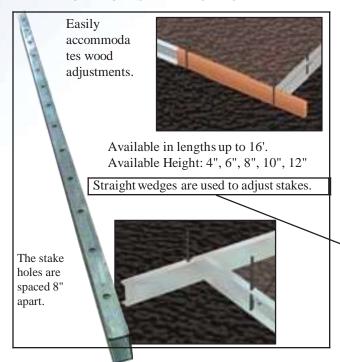


15/16" STEEL STAKE

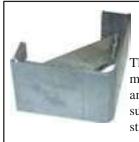
Available in different lengths to accommodate heights.

This border uses steel stakes of 7/8" x 18" or 7/8" x 24"

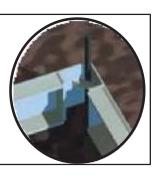




ISC



The ISC's measure 6" x 6" and come with support for steel stakes.



3/4" STEEL STAKE



The aluminum edge form utilizes 3/4" x 18" steel stakes.

Available in varying lengths to accommodate different heights.



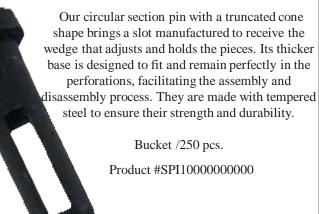
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STANDARD PINS AND WEDGES

We offer a wide variety of pins and wedges designed to increase your efficiency regardless of the application.

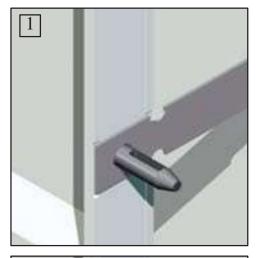
PASADOR STANDARD



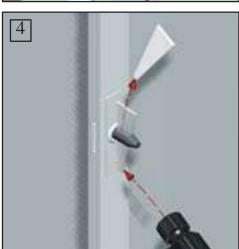


~Typical Connection of Slotted Pin and Straight Wedge~

WEDGES







STRAIGHT

The wedges are used to adjust the joint of two mold pieces, ensuring the correct position of spacers and formwork panels.

250/Bags

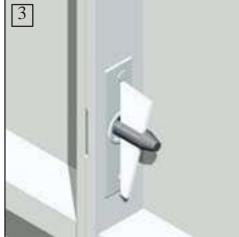
Product #SWE10000000000

CURVED

Curved wedges have the same function as straight ones. The curvature allows for greater ease of insertion and reduces the risk of damage to the contact surface.

250/Bags

Product #SWE20000000000

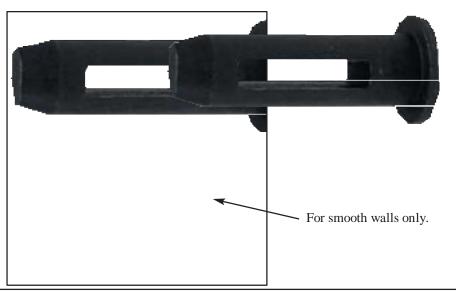




SPECIAL PINS

FLAT HEAD PIN

The flat head pin is used for special cases such as concrete casting against existing walls or when used with a single rail in a single panel. It is also used in the case of flat panels for casting 36" high walls using 3' x 8' panels.



Product # SPI20000000000

ADJUSTMENT PANEL PIN W/ HEAD

This pin goes through a complete 2" adjustment panel connecting to another panel and adjusting them with the wedge. It is convertible to 1' and 1 1/2" using the holes and nails to combine them.



Combination of - 1", 11/2", 2"

Product # SPI01152000000

PAX PIN

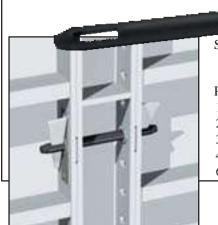
The pax pin is slightly longer than the standard and is used with the pax forming system.



Product #SPI30000000000

STRAIGHT PIN FOR ADJUSTMENT PANELS

These pins are designed to go through the adjustment panels and are secured using two wedges, one on each end.



Straight pin for adjustments

Products #

- 1" ~ SPI01000000000
- 2" ~ SPI02000000000
- 3" ~ SPI03000000000
- 4" ~ SPI04000000000
- $6" \sim SPI06000000000$

CURVED PIN

The curved pin is used in special corners and radial applications.



Product # SPI40000000000



PANEL FIXED ACCESSORIES

System of fixed pins installed at the factory. When panels have fixed pins installed, the use of wedges is only required on the top and bottom pins.



LONG AWAY

"Long Away" pins are used in the top and bottom holes where long bolts, when retracted, must go through the vertical reinforcement bars of the panel.

Available for panels from 90 cm to 40 cm wide.

Product # SPI50000000000

SHORT AWAY

"Short Away" pins are used in all connection holes except for the top and bottom ones on panels from 90 cm to 40 cm wide. These can be retracted to allow the use of standard pins and wedges. Product # SPI51000000000

SHORT AGAINST

The "Short Against" pin is popular among contractors working with 2.70 m high panels. These pins are fixed to the panel in the last upper hole where no spacers are used. The "Short Against" pins are also used with adjustments from 15" to 9" wide. These cannot be retracted to allow the use of standard pins.

Product # SPI52000000000

Available in panels from 36" to 9" wide. Typically, they



are only installed on 36" or 90 cm panels.



STANDARD STEEL SUPPORT

The WTF steel aligner support can be used with wood or aluminum aligners. The supports are attached directly to the panels to align the wall and minimize the need for additional supports. In most residential constructions, a line of aligners at the top of the walls is sufficient for







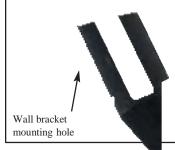




Wall bracket mounting hole.

STANDARD STEEL SUPPORT

The standard aligner supports are of excellent quality and can be quickly and efficiently attached to formwork panels. They can be used with smooth or textured panels.



Available in:

 $2" \times 3" \sim Product$

SWA23000000000

2" x 4" \sim Product

SWA24000000000

2" x 6" ~ Product

SWA26000000000

2" x 8" \sim Product

#SWA28000000000

COMBINED STEEL SUPPORT

Aligner support with combined mounting holes for use with smooth or textured panels.

Available in:

2" x 3" ~Product

#SWA23000000090

2" x 4" ~Product

#SWA2400000090

2" x 6" ~Product

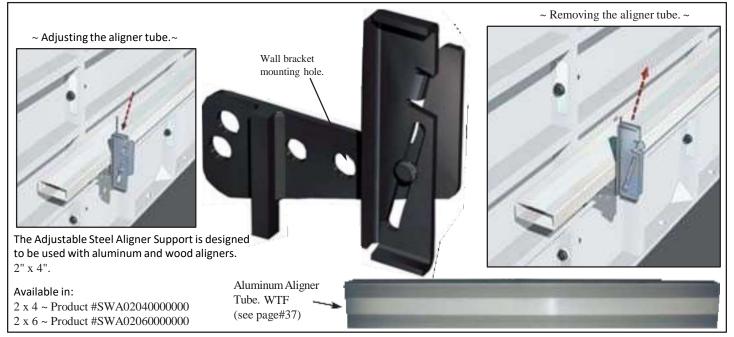
#SWA26000000090

2" x 8" ~Product

#SWA28000000090

ADJUSTABLE STEEL SUPPORT

The WTF adjustable aligner support is one of our recent innovations.





VERTICAL ALIGNER SUPPORT

When panels overlap, vertical aligners may be necessary to ensure alignment of pieces.



ALUMINUM ALIGNER SUPPORT

The aluminum aligner support is designed to be used with three-hole spacers on the top of walls. These

supports simply insert into the ends of the spacers and have no loose parts.

Available in:

2" x 4" ~ Product #AWA24000000000 2" x 6" ~ Product #AWA26000000000





Note: When used with WTF spacers, disassembly is easy by tapping the support from top to bottom with a wooden tool. 2" x 4."

VERTICAL RULE

Used in the same way as the Vertical Aligner, the Vertical Rule is quicker to apply as it does not require wooden parts. Typically used on the opposite side of the aligner. It saves time and the need to lock overlapping pieces.

6/12 ~ Product #AWA10000000010 8/8 ~ Product #AWA10000000020



ALUMINUM ALIGNER

SCAFFOLD AND ALIGNER COMBINED SUPPORT

ALIGNER TUBE



Traditionally, aligners are made of wood, but the aluminum aligner is gaining more and more fans due to its attractive

durability and consistent measurements.

Lengths:

12' ~ Product #AWA3500001200 24' ~ Product #AWA3500002400

Note: Although they can be used with most aligner supports, the aluminum aligner was designed to be used with the WTF adjustable steel aligner support.



(See Page. #35)

SCAFFOLD SUPPORT



Our scaffold system is easy to use and, when applied to the already assembled molds, provides greater safety and ease of work.

Available in various sizes.

By standard aligner sizes:

2" x 4" ~ Product #SBK00240002800 2" x 6" ~ Product #SBK00260002800

SCAFFOLD SUPPORT WITH POST



Wall-Ties scaffolds come equipped with a safety railing throughout. With specially designed supports, 2" x 4" wooden braces are placed to obtain a safe working platform.

2 x 4 ~ Product #SBK00240002890

2 x 6 ~ Product #SBK00260002890



Note: Wooden aligners can be used together with scaffold planks..







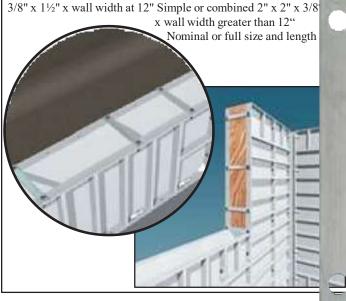


SPECIAL WALL SPACERS



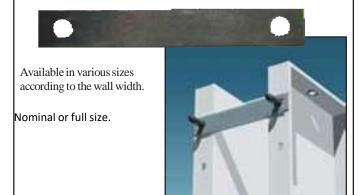
Reusable aluminum bars are used as support for covers and on the top edges of panels in a horizontal position. Their application in parapets allows for one side to be raised to accommodate the slab in monolithic pours.

They can be used with pins and wedges.



REUSABLE STEEL SPACERS

Designed without breakaway notches or cavities for steel bars, these spacers are removable from the poured wall and reusable.



SPACER SLEEVE

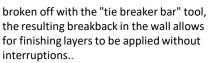
These spacers are used with a foam or plastic sleeve that facilitates their removal.



SPACERS FOR CONCRETE HOUSING

INTERIOR HOUSING **SPACER**

The spacers for interior walls are part of the WTF housing system. This spacer has a breakaway portion of 5/16" on both sides. Once the tips are



Product #TTSP0400002101

EXTERIOR HOUSING SPACER

The spacers for exterior walls are part of the WTF housing system. This spacer has two breakaway points at different depths within the poured wall. The first break is at 2". This is designed to be used with the WTF insulation plate and spacer retainer. Once the wall is poured, the spacer is broken using the WTF breaker bar. The spacer breaks at a depth of 2", preventing thermal bridging with the steel. The second breakaway point of the spacer is at a depth of 5/16" from the outer face of the perimeter wall, allowing for uninterrupted application of finishes on the interior face of the perimeter walls.

Product #TTSP0600002104

FOAM RETAINER AND SPACER





SLIDING SLAB CLIP

The sliding slab clip is designed to be used with the WTF cornice system. It can be used with both smooth and molded cornices. The clip's pin is inserted through the connection hole on the upper profile of the wall panels and into the cornice guide channel, securing alignment and connection.

Product #SCP120000000000





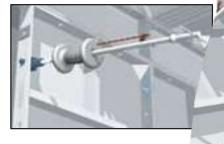


MOLD HOLDER

The window mold holder is used when it is necessary to suspend a window mold from the top of a wall panel at the required height.

Product #SCP13000000000

SLIDING HAMMER

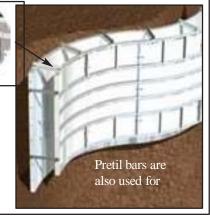


The sliding hammer is used to and disassemble remove components of the WTF system. It facilitates the removal of elements without damaging molds concrete.

Product #SOT10000000000

PRETIL BAR

Pretil bars are used to suspend one side of pretiles or low walls, allowing casting.



HAND PUNCHER

It is used to punch holes in panel edge profiles and create additional connection points.

It is very easy to use, especially for onsite adaptations.

Product #SOT40000000000



PLYWOOD ADAPTER

The plywood adapter allows the builder to create wood adjustments that are compatible with aluminum panels using 1/2" or 5/8" plywood plates.





"Crete-Lease 727" Mold Release Agent"

"Crete-Lease 727" is a mineral-based mold release agent that has been successfully used for over 25 years. It is applicable under extreme temperatures, both high and low, and exceeds federal and state regulation requirements in the US.

Basic Usage: Crete-Lease 727 allows for easy demolding by removing the concrete panels from the set

concrete, leaving a smooth and stain-free surface. With this mold release agent:

- ~ With proper application, panel cleaning time is reduced by 70%.
- ~ Bubbles on concrete surfaces are reduced.
- ~ It does not interfere with the application or adhesion of finishes or curing elements applied to concrete surfaces.
- ~ It works excellently with aluminum panels.
- ~ It can be used under extreme temperatures.
- ~ Skin reactions are minimized.
- ~ It can produce a high visual impact (CCS 2) or typical concrete surfaces (CCS 3, CCS 4, CCS 5).



Even when applied 10 times more than required:

- ~ It does not produce stains.
- ~ The concrete surface is not affected.
- ~ It does not cause efflorescence.

Ready to use - Available in: 5 Gal. Pails

- ~ Product #CMCR7270000005 55 Gal. Drums
- ~ Product #CMCR7270000055 275 Gal. Packs
- ~ Product #CMCR7270000275

Crete-Lease "BREAK-IN" for Aluminum Panel Curing

It is used for curing new aluminum panels before coming into contact with concrete... helps prevent adhesions.

Basic Usage: For curing the contact surface of aluminum panels. Crete-Lease "Break-In" oxidizes the panel's aluminum surface in advance.

Crete-Lease:

- ~ Cures the aluminum surface even under extreme temperatures.
- ~ It is a quick procedure.
- ~ Removes oil residues.
- ~ It is biodegradable.







INSULATION

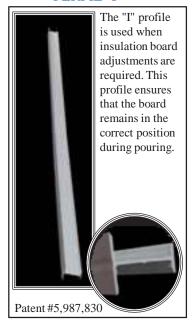
INSULATION FOAM FASTENER

This fastener has the function of holding the insulation foam board in the correct position during pouring. Once the concrete has set, a part of the separator is broken off, removing it from thewall. Patent #5,987,830 Assembly required

"F" PROFILE



PERFIL "I"



FOAM BOARD

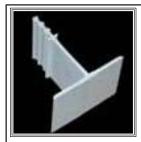
WTF uses a 2 lb. per cubic foot density PerformGuard® EPS foam board, expanded polystyrene with special termite-resistant treatment.

- ∼ Termite-resistant
- Resistant to other insects
- ~ Non-toxic and easy to handle
- ~ Environmentally friendly
- ~ Exceeds contact requirements
- ~ Cost-effective

Available in various sizes



"T" PROFILE



Available in 2 1/2" length

Patent Pendient

The "T" profile is used with 90 cm wide boards to create an intermediate center line of adhesion. It is placed in the center of the insulation panels, allowing another connection line on the outside.



A special cavity is created in the insulation boards for the placement of the separators with the WTF insulation board fastener.



This cavity is only required on one side of the board.



Insulation begins in the corners using WTF's F-Section profiles.



Installation of exterior panels.





INSULATION



The WTF insulation board and plate fastener are designed to fit perfectly into the holes.





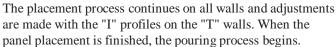
The next piece of insulation is placed using the recesses created to accommodate the plates with the fasteners and spacers.

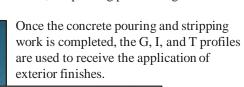


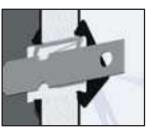


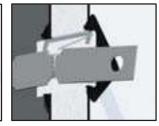


Following the order of the process, after the aluminum panel stripping, the spacers are broken with the WTF Tie Breaker Bar.











The spacer system with its fastener is designed to break two inches in to avoid any possibility of thermal bridging.

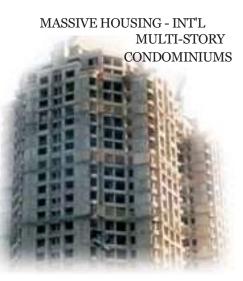


**Protected under U.S. Patents No. 5,194,323 and No. 5,720,108. Other U.S. and Foreign Patents Pending. ©2001 AFM Corporation





WTF formwork and molds can be used for an infinite number of concrete casting applications. In the following systems, WTF has received industry recognition as a global leader

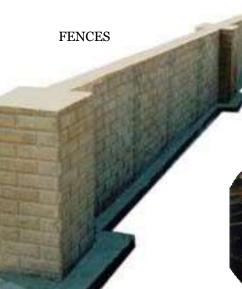












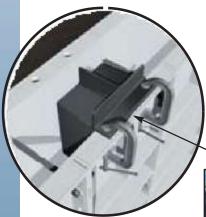


Foundation System

As the leading manufacturer and distributor of aluminum formwork products for on-site cast-in-place concrete, Wall-Ties & Forms has developed the Foundation System for specialized contractors in basement and concrete foundation construction. Whatever the application, from simple structures to the most complex, our foundation formwork system can meet your needs.



The key to success in this competitive foundation industry is productivity. We know that lower cost and greater profit are determined by efficiency. That's why we designed a foundation wall formwork system that is fast and easy to use. WTF equipment is lightweight and incredibly durable with a long working life on construction sites.



Beam Blocker



The WTF Foundation System comes equipped with all the necessary components to assemble the formwork and cast concrete walls in virtually any situation. It is the most versatile system on the market.

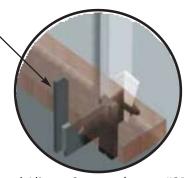
Assembly pattern available:

6-12,

8-8,

8-24.

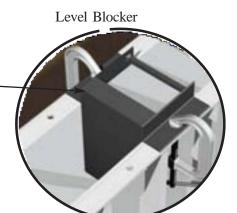
Other patterns available upon request. The largest panel is 36" wide. Adjustment range of 35" - 1" in width increments of 1". The widest selection of smooth and textured formwork accessories on the market.



Steel Aligner Support (see p. #35)







Recessed Blocker





- ~Our panels have been tested for over 20 years and remain strong and resilient for daily use.
- ~ They are strong and lightweight and have more surface contact than wooden forms.
- ~ The WTF SuperLite panel weighs 20 pounds less than our standard panel and with proper care can last over 5 years.
- ~ Simple and uncomplicated components like pins, nails, and spacers allow for easy and quick assembly and disassembly of forms.
- ~ Our aluminum forms are rugged, durable, and easy to dismantle, assemble, and transport.



In addition to the foundation system, WTF offers the unique and innovative Crawl Space system, a special foundation system.

All these factors contribute to your benefit.



International Housing

- 1. Single-Family and Multi-Family Housing In response to the high demand for efficient mass construction of affordable housing, the WTF housing system offers:
- ~ Lower material and labor costs
- ~ Faster construction speed
- ~ Increased productivity
- ~ Greater benefits
- ~ Ease of use and application
- ~ Simple assembly
- ~ Resilient and durable formwork
- ~ Superior quality finishes





Quadruplex Housing Project, Philippines

Strip Housing Project, Philippines

Our International Aluminum Formwork System for Housing allows for reduced construction costs and increased speed of construction for single-family, multifamily, low-rise and high-rise units, commercial buildings, and more.

- ~ Construction with aluminum formwork and concrete is very cost-effective and efficient, especially in areas where wood is scarce.
 - ~ The necessary concrete elements (cement, sand, gravel, and water) are local and easily accessible worldwide.
 - ~ Cast-in-place concrete construction is more resilient and of higher quality than brick or block construction. Aluminum formwork structures are of superior quality compared to other alternatives.



Housing Project, Mexico

Aluminum formwork is highly durable. With appropriate use and maintenance, it easily lasts 10 years or more.

- ~ A team of 10 to 12 workers can produce a 60 sqm monolithic unit per day per team.
- ~ Aluminum formwork is lightweight and easy to handle. The largest piece is easily transportable by a single person.
- ~ With quick and simple training, your unskilled workers can become efficient and productive labor.
- ~ The WTF International system allows for high design flexibility and ease of adjustment and changes.

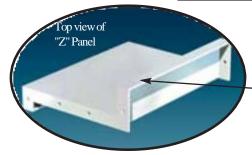


2. High-rise Multifamily Residential Buildings In recent years, WTF has been involved in the construction of high-rise residential condominium buildings in South America and Asia.



Bottom view o



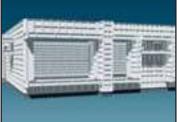


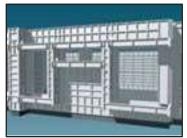
One of our innovative designs is the "Z" Panel, which simplifies the assembly and disassembly of forms for cantilevered bay windows, balconies, and other protrusions, reducing the number of required pieces.



WTF is constantly developing timesaving solutions for the various formwork challenges that arise in building construction.







Our construction system allows for the integration of all structural elements (load-bearing walls, columns, beams, slabs, stairs) as well as non-structural elements (enclosure walls - without loads, balconies, decorative elements, etc.).



Aluminum Mold Systems for Pools and Spas

WTF has been designing and manufacturing aluminum molds for pools since 1980. The WTF aluminum mold system for pools and spas is designed with pool builders in mind. We are confident that one of our systems can meet your needs and bring the benefits you are looking for as a pool builder and promoter, whether you build concrete or vinyl-lined pools, or both.

Vinyl-Lined Pool Construction

The WTF pool system with concrete walls lined with vinyl sheeting has more strength and durability than those using traditional construction methods. Using our WTF construction system, you can produce more pool units per year. In addition, the benefits are guaranteed since when a pool is completed, you take your molds to build another one and don't leave it lying around in a neighbor's yard! The advantages of the WTF pool system are several:

- 1. You assemble, pour, and disassemble molds within 24 hours.
- 2. Stairs are integrated.
- 3. Molds have an accessible and competitive price.
- 4. More than 100 different pool designs.





20' x 32' Mountain Lake

The WTF concrete pool system with vinyl sheeting adapts easily to build completely concrete pools.



Roman-style Stair Systems



Installation of vinyl sheeting in a 26' x 52' "Mountain Lake" pool



Cast-in-Place Surface Filte

Pilaster Mold (see page #25)



POOL & SPA SYSTEM



6' External Staircase

90° Radial Corner (see page #22)



A finished 21' x 40' Mountain Lake pool.

Concrete Pool and Spa Construction

The WTF Concrete Pool System allows the builder to construct with greater speed and efficiency, reducing costs and ensuring quality in the final result. The WTF concrete pool system is designed for monolithic casting of floors and walls (at the same time) of pools, swimming pools, and spas, in a single event. Among the most significant advantages are:

1. The simplicity of the system facilitates the training and use of unskilled labor

2. The mold equipment requires very little maintenance and has a durability of



"Mountain Lake" pool of 26' x 52' with monolithic casting

- 3. The quality of the concrete upon removing the molds greatly reduces finishing time and material
- 4. The design flexibility allows the pool contractor to have options for other coatings



6-foot diameter spa under construction



A Finished Octagonal Spa



A Reversed "Lazy L" of 20' x 48'

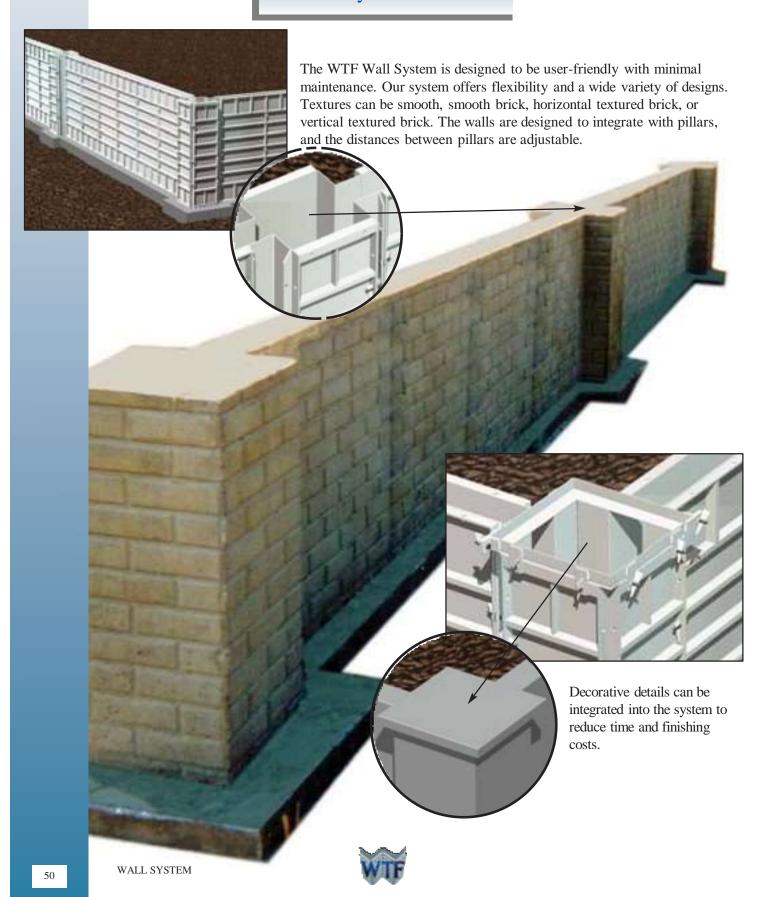


POOL AND SPA SYSTEM

49

Water features with cascades and decorative edges are easily constructed with the WTF pool system.

Wall System

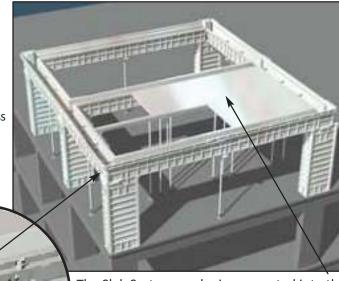


Pillar and Beam System

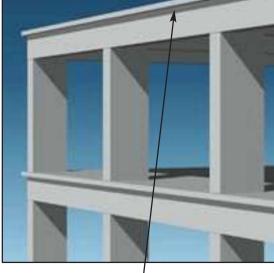
WTF has designed a Pillar and Beam System for multiple applications in the international and domestic market.

Our pillar and beam molds are optimally designed to produce concrete structures of variable sections while keeping mold costs to a minimum. The mold design process is based on customer needs and offers the following options:

- Combination of any structural element: Pillars, Beams, Walls, and Slabs
- 2. Cavity accessories for beam interconnection
- Fixed or adjustable Pillar and Beam molds
- Arch structure and circular column molds are also available



The Slab System can be incorporated into the Pillar and Beam System (see page #28-29)



Decorative edges on Beams and Slabs are also available

Beams are designed with a removable prop head to leave the props and remove the bottoms and sides of the beam when concrete curing allows. The props remain until the required concrete strength is reached (see page #28-29)



PILLAR AND BEAM SYSTEM

Water Tanks and Reservoirs System

The standard Wall-Ties & Forms panels are used to produce circular, square or rectangular water tanks and reservoirs of varying sizes. The basic water tank system can be configured and adapted to meet our customers' needs and the variables of different job sites. The same consistent attributes and benefits of the WTF system, such as construction speed, cost reduction, ease of application, long lifespan, and minimal maintenance, also apply to this water tank and reservoir system.











WTF has built a strong global presence in the past decade. We now have system formations in over 20 countries including:

Mexico
Chile
Guatemala
Costa Rica
Honduras
Venezuela
Jamaica
Dominican
Republic

Bahamas, Kenya Nigeria Israel Jordan Sudan Afghanistan Russia

Uzbekistan Cyprus Spain Portugal Philippines Hong Kong.



Guadalajara 1,700 units.







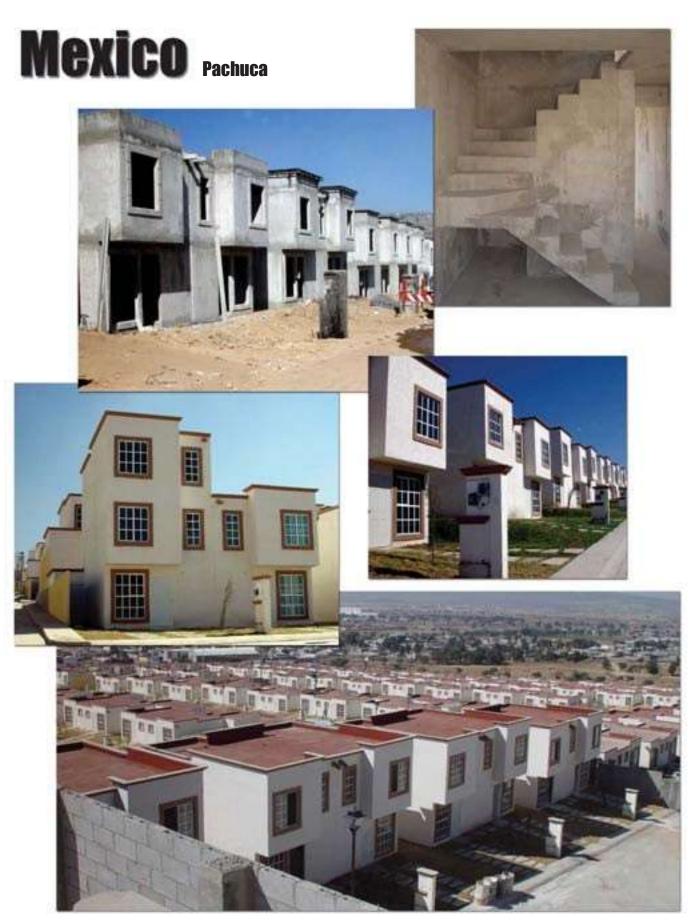


Guadalajara - Housing of 60 m2 x 2 Duplexes.



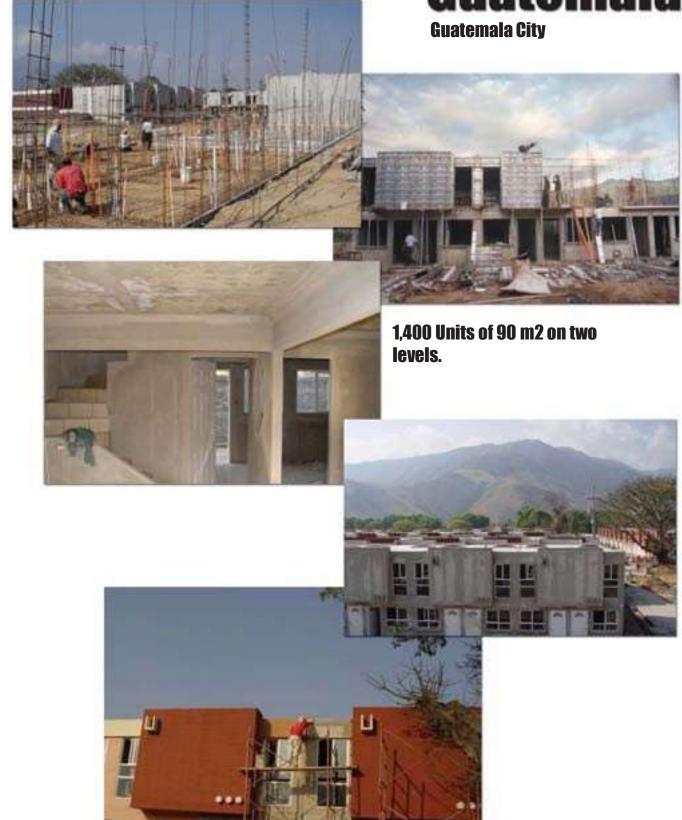




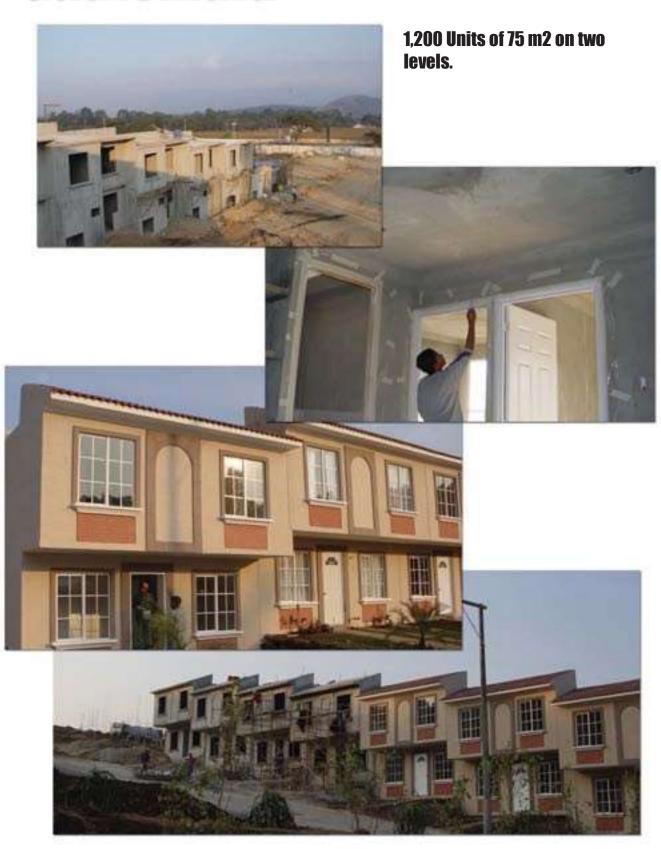


3,000 Units with one, two, and three levels.



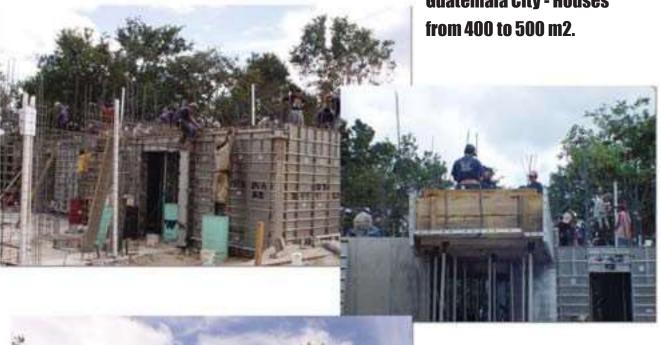


Guatemala



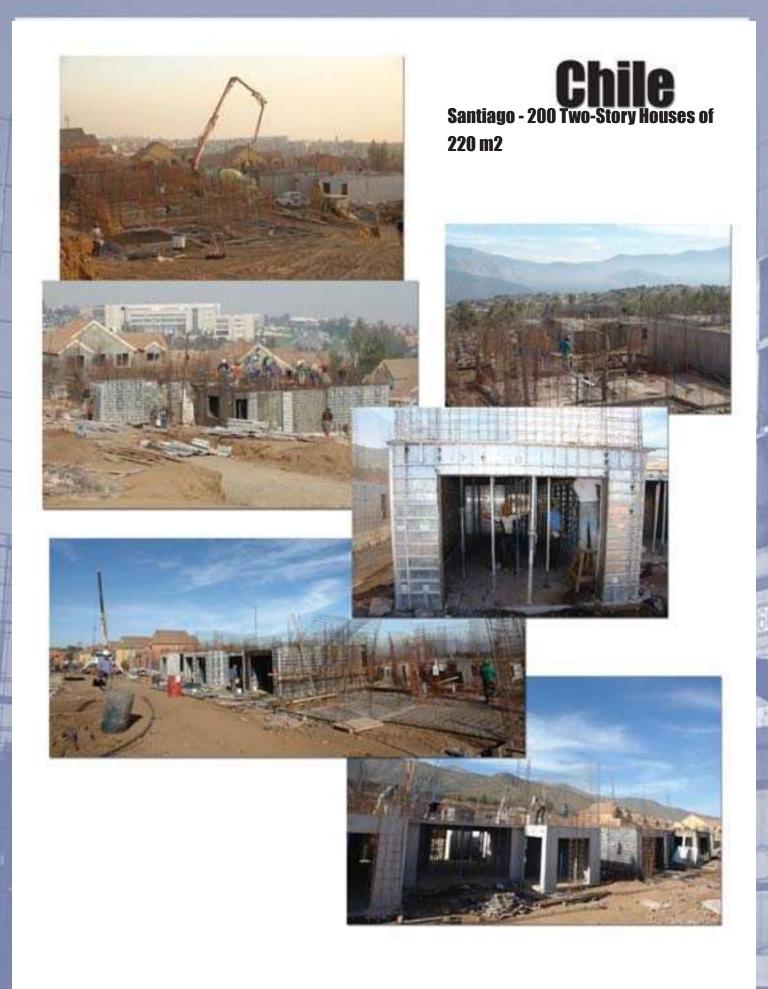
Guatemala

Guatemala City - Houses





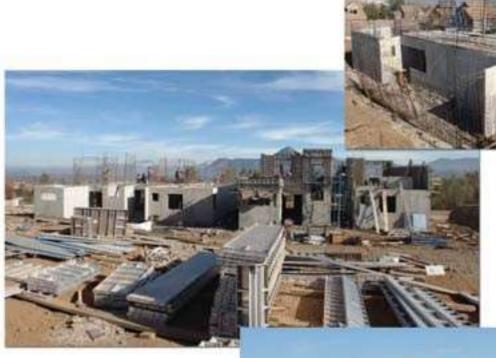


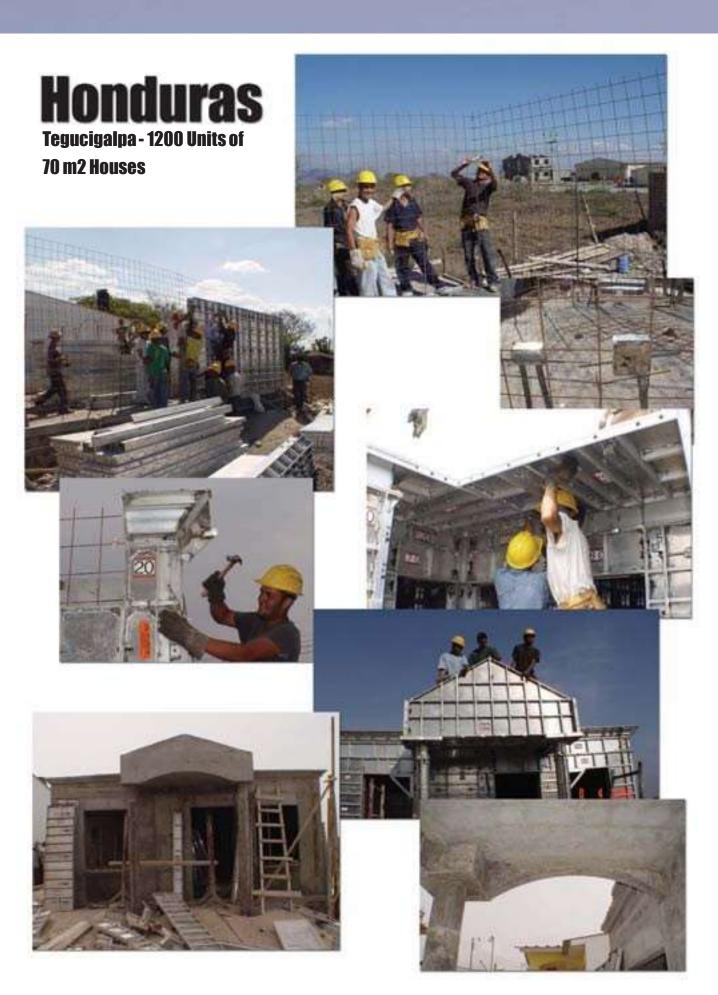


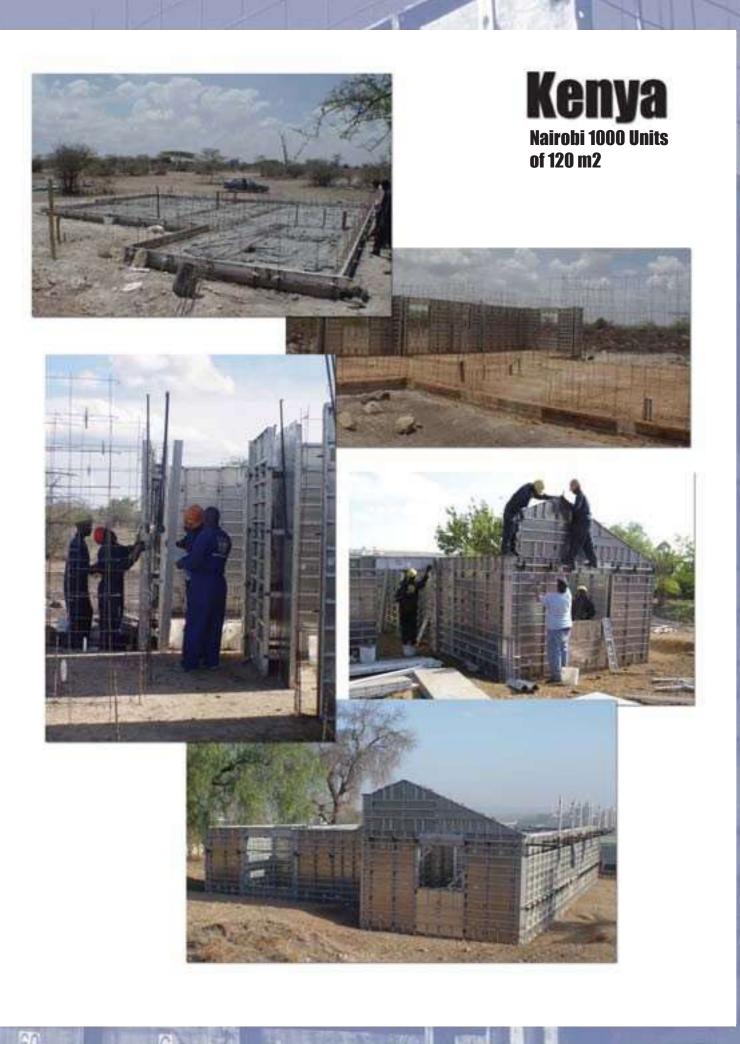


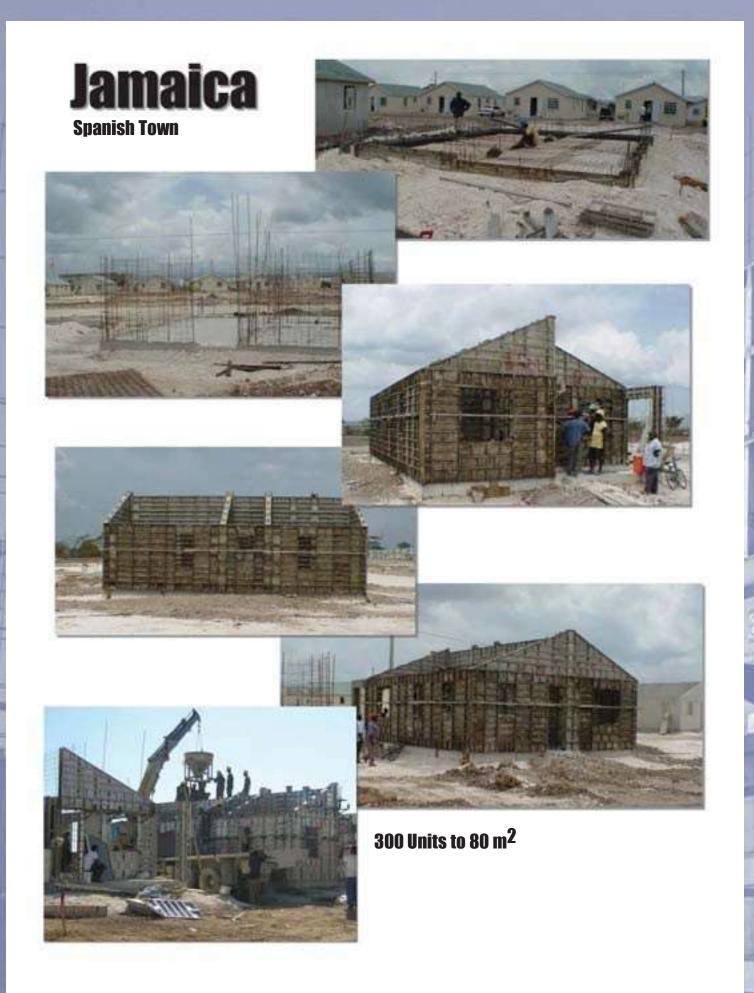
Chile

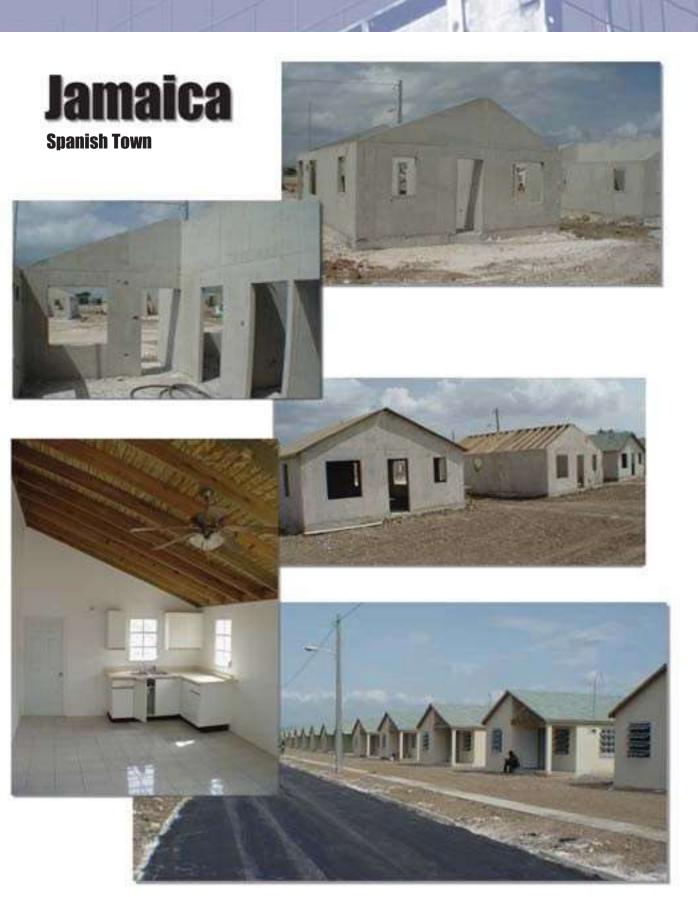
Santiago - 200 Two-Level Houses of 250 m2 Each











Filipinas Townhouses









Filipinas





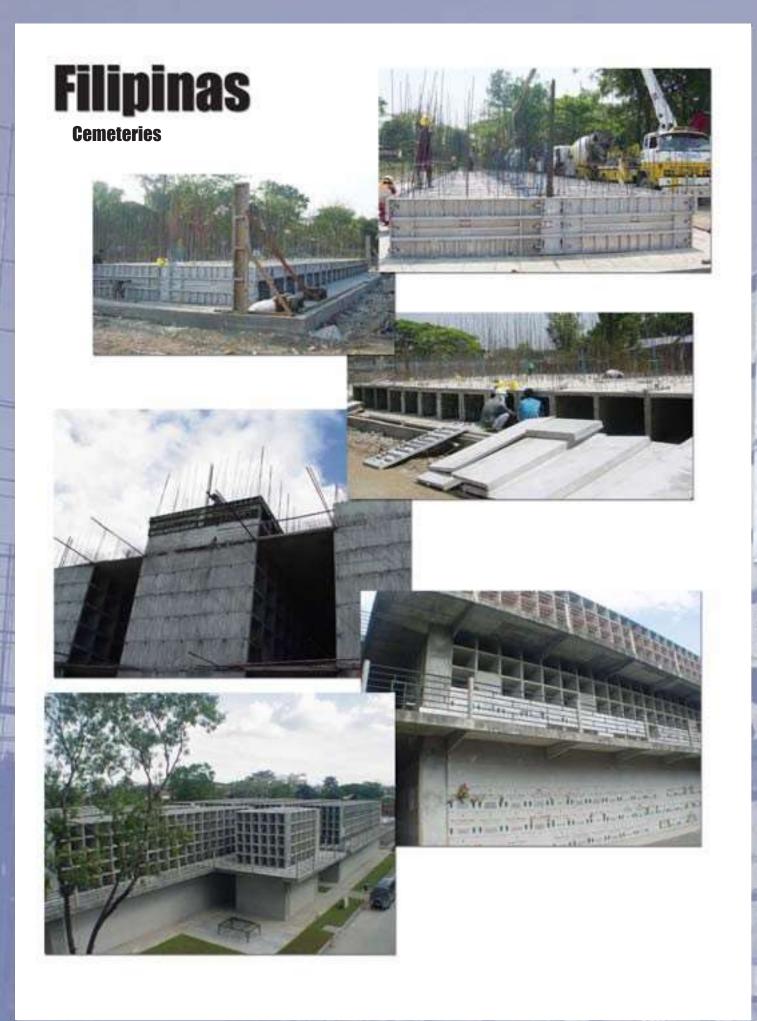












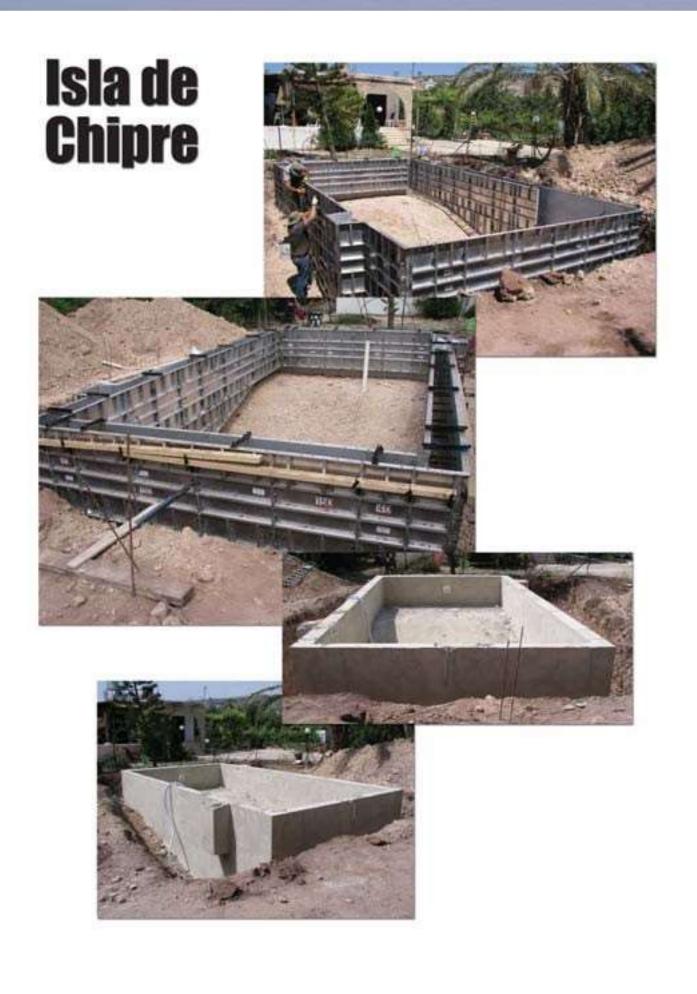




Concrete pool.







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www.wallties.com

Discover the latest in marketing and con "WTF" CD from Wall-Ties & Forms.	nmunication technology with this interactive
In case of loss or misplacement of this of following phone numbers: Offices in Kansas City, USA Mobile	CD, request a new copy by calling the 913-441-0073 913-484-9420



Wall-Ties & Forms, Inc.
Catologo Internacional de Productos

EVERYTHING STARTS WITH A WALL TIE...

Wall-Ties & Forms, Inc. (WTF) is one of the world's largest producers of aluminum forms for concrete, and also the leading designer and manufacturer of aluminum forming systems. Over 25 years ago, WTF began by producing thousands of ties. Today, it produces and ships over 30 million ties and more than 100,000 aluminum form panels per year.

In 1976, Orval Engelken and Ross Worley, each with a long and successful career, one as a national sales manager and the other as a product designer and manufacturing expert, joined forces to create WTF based on three basic principles that still hold true today:

1To design and produce a forming system that meets the needs of the user- the contractor - rather than the needs of the forming manufacturer, using the best quality materials and the most advanced production technology.

2To offer the best technical training, logistical support and supervisory assistance to ensure the most efficient use of the system with the best possible results for the user.

3 To provide all of this at a competitive price.

Orval Engelken y Ross Worley

